Revised Draft Environmental Impact Statement/ Environmental Impact Report

# Truckee River Operating Agreement



California and Nevada

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United States Department of the Interior
Bureau of Reclamation
Fish and Wildlife Service
Bureau of Indian Affairs

State of California
Department of Water Resources

# Water Quality Appendix

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# WATER QUALITY APPENDIX

# OVERVIEW

Recent model results reflect more accurate boundary conditions for the Dynamic Stream Simulation and Assessment Model with temperature (DSSAMt) riverine water quality model which were derived from Truckee River Watershed Analysis Risk Management Framework (WARMF) model results. Model results incorporate future land use changes and therefore nonpoint source loadings to the riverine model. Model results also incorporate more accurate point source loadings to the riverine model. Recent DSSAMt model results are more reliable and tend to coincide with environmental observations due to model improvements as well as better inputs.

Water quality was analyzed in detail using historical data and the DSSAMt water quality model. Historical data is summarized by Bender (1995). Documentation for the water quality model is provided by Brock and Caupp (RCR04-1.0, 2004). The water quality model was calibrated to wet, median, and dry hydrologic conditions (Brock and Caupp, RCR04-2.0, 2004) and verified to dry hydrologic conditions (Brock and Caupp, RCR04-2.0, 2004). A sensitivity analysis was done to identify major variables and model coefficients (Brock and Caupp, RCR04-2.0, 2004). Current condition, No Action Alternative, Local Water Supply Alternative (LWSA), and TROA Alternative were simulated. For support of the fishery analysis, a temperature analysis for extremely wet, median, and extremely dry water years was done for various fish species and life stages of each species for the current condition and each alternative (Brock and Caupp, RCR04-3.0, 2004, RCR04-5.0, 2004, RCR04-7.0, 2004, and RCR04-9.0, 2004). A water quality analysis was done for wet, median, and dry calendar years for the current condition and each alternative (Brock and Caupp, RCR04-4.0, 2004, RCR04-6.0, 2004, RCR04-8.0, 2004, and RCR04-10.0, 2004).

Flow is the most important variable affecting Truckee River water quality. Typically, wet hydrologic conditions provide the best water quality and dry hydrologic conditions the worst. Selection of representative hydrologic years was critical to analyzing water quality.

Flow data were statistically analyzed for use as a water quality indicator and for use in selecting representative hydrologic years. Analyses were based on water years where possible. A water year begins October of the previous year and extends through September. However, calendar year hydrology was required for the water quality assessment to accommodate state standards that are based on the calendar year that extends from January through December.

# II. HYDROLOGY FOR WATER QUALITY ASSESSMENT

Water quality was analyzed using both a single variable analysis and a multiple variable analysis. Probability of flow exceedence based on 95 water years of monthly flow from 1901 to 1995 was used for single variable analysis. Probability of flow exceedence indicates the percent of time the annual flow was exceeded historically. Single variable analysis provided

information on the frequency of occurrence of flows. However, to adequately address hourly, daily, weekly, and often seasonal variations, representative flow years within this 95 year period were used for multiple variable analysis of water quality. This dual approach takes into account the effects of flow and also other major variables such as initial conditions, meteorology, and nutrient and organic loadings.

Data availability and both flows reflecting natural local runoff and flows reflecting the effects of storage operations were considered in selecting wet, median, and dry years for multiple variable water quality analysis. Supporting documents may use the term average instead of median. Average does not imply the statistical mean, but rather is a general term to denote central tendency of flows or near median. Supporting documents may also use the term violated instead of exceeded. An exceedence does not imply a violation which is an enforcement term, but rather to denote going outside the range of a desired criteria.

Annual averages of natural local runoff just upstream of Farad, California, without the effects of storage operations were ranked for both calendar and water years 1901 through 1992. Table 1 compares the probability of exceedences for annual averages for wet, median, and dry years for calendar and water year periods. For years 1986 (wet), 1989 (median), and 1992 (dry), flow exceedence statistics based on calendar years are nearly identical to those for water years. This indicates these years represent the intended flow condition.

Table 1	—Probability of	flow exceedences

Probability of flow exceedences for natural flow above Farad based on calendar years 1901 through 1992								
Condition Calendar year Probability of flow exceedence (%)								
Wet     1986     11.8       Median     1989     50.5       Dry     1992     93.5								
Probabi		ces for natural flow above Farad ars 1901 through 1992						
Condition	Water Probability of flow exceedence Condition year (%)							
Wet Median Dry	1986 1989 1992	12.9 49.5 94.6						

Analysis of flows including the effects of storage operations indicated similar wet, median, and dry patterns. Table 2 shows flow ranking just downstream from Reno, Nevada, at Vista, Nevada, for the 21 water year periods from 1973 through 1993 which includes the effects of storage operations. This 21-year period includes the flow conditions for the modeled wet, median, and dry years (1986, 1989, and 1992). A ranking of water year 7-day low flows at Farad, California; Vista, Nevada; and Nixon, Nevada (table 2) shows that 1992, the baseline

year, was an extremely dry condition that followed fairly dry conditions and represents near worst case low flow conditions in the Truckee River downstream from Derby Diversion Dam.

Table 2.—7-day low flow and rank for three Truckee River stations

	reserv upstream State	eam from oirs and of CA/NV line at d, CA	Downstream from Reno, NV, at Vista, NV		Downstre Derby Diver Nixor	sion Dam at
_	7-day	low flow	7-day l	ow flow	7-day lo	ow flow
Water year ending September 30	(cfs)	(rank)	(cfs)	(rank)	(cfs)	(rank)
1973	352	14	381	17	44	14
1974	385	19	412	18	123	18
1975	439	20	457	20	130	19
1976	383	18	427	19	145	20
1977	71	6	77	7	23	7
1978	47	2	62	5	20	6
1979	174	9	212	10	29	12
1980	300	12	290	14	33	13
1981	230	10	189	9	24	9
1982	284	11	292	15	52	16
1983	460	21	609	21	464	21
1984	363	15	333	16	64	17
1985	366	16	283	13	27	11
1986	327	13	278	12	44	15
1987	380	17	261	11	25	10
1988	81	7	82	8	20	5
1989	67	5	70	6	23	8
1990	101	8	56	4	11	3
1991	51	3	46	2	8.1	2
1992	57	4	47	3	6.2	1
1993	44	1	44	1	16	4

Note: 7-day low flow is the lowest mean discharge for 7 consecutive days for a water year.

# III. HYDROLOGY FOR BIOLOGICAL ASSESSMENT

For biological environmental assessment of current conditions and alternatives, temperature analysis was done for extremely wet, median, and extremely dry 5-year water-year periods to accommodate storage effects on biology.

Meteorology and flow data for temperature modeling was available from October 1961 through December 1992 and this period was used in selecting 5-year periods of water years from the 92-year record. Table 3 lists the ending water years used for fishery temperature analysis.

Table 3.—Probability of flow exceedences for natural flow upstream of Farad based on 5-year periods for water years 1901 through 1992

Condition	Ending year of 5-year period	Probability of flow exceedence for 5-year period (%) <sup>1</sup>
Extremely wet	1986	1
Median	1966	47
Extremely dry	1992	99

<sup>1</sup> Based on monthly medians of the five water years.

# IV. WATER QUALITY MODEL INPUTS

A complete description of flow and water quality model inputs and outputs has been documented by Brock and Caupp of Rapid Creek Research, Inc. (RCR04-1.0, 2004 through RCR04-10.0, 2004). Table 4 provides a list of water quality supporting documents for the revised DEIS/EIR:

Table 4.—Water quality supporting documents for revised DEIS/EIR

RCR Report	Document topic	Approximate number of pages
04-1.0	DSSAMt Program Documentation	110
04-2.0	Calibration to 1986, 1989, 1991, 1992, and 1993	200
04-3.0	Temperature—Current Condition	379
04-4.0	Water quality—Current Condition	709
04-5.0	Temperature—No Action	296
04-6.0	Water quality—No Action	800
04-7.0	Temperature—TROA	296
04-8.0	Water quality—TROA	800
04-9.0s	Temperature-LWSA	296
04-10.0	Water Quality-LWSA	800

<sup>&</sup>lt;sup>1</sup> Report number indicates year draft was assembled (2004).

Data sources; river and irrigation flow summaries; meteorological data; water temperature boundary conditions; water chemistry boundary conditions; and water quality standards, based on beneficial uses as well as desired fishery criteria, are presented in the above documents as statistics, tables, and graphs.

Hydraulic geometry, flows, meteorology, and water quality constituents are the primary inputs to the water quality model. For the calibration years, initial boundary conditions and timestep boundary conditions were derived from measured data. For simulation of current conditions and alternatives, flow boundary conditions were provided from the monthly Truckee River operations model (operations model). It was assumed that relative percentages of the lumped diversions attributable to each of the active diversions would be the same under current conditions and the alternatives. Water quality boundary conditions were derived from measured data, from statistical correlations, or from the Truckee River Watershed Analysis Risk Management Framework (WARMF) model (Chen and Weintraub, 2002). The WARMF model, a daily watershed loading model, accounts for future land use changes and is a better tool to predict water quality boundary conditions for the hourly DSSAMt riverine water quality model than estimates of future conditions. The 1999 historical land use coverage was used for current conditions. Estimated future land use coverage for the year 2020 was used for future alternatives. Both coverages used the same eleven land use categories. Actual meteorology was used for all years simulated.

Water temperature inputs at the upstream model boundary for current conditions and the alternatives were generated from multiple linear regression equations. Historical air temperatures and flows were used to develop the coefficients for the multiple linear regression equations. Bivariate statistical analysis indicated that a majority of the variation in mean daily water temperature is due to variation in mean daily air temperature (Brock and Caupp, RCR04-3.0, Chapter 11). Flow also accounted for a portion of the variability and was accounted for in the estimation procedure for water temperature at the upstream boundary. Actual meteorology and simulated flows from the operations model were used as inputs to predict water temperature inputs for the model

# V. WATER QUALITY MODEL CALIBRATION

The following is a summary of the water quality model calibration. A more detailed description is provided by Brock and Caupp (RCR04-2.0, 2004).

Four calendar years were used for the water quality model calibration (1986-wet, 1989-median, 1992-dry, and 1993-median). The two near median years, 1989 and 1993, differ greatly since only 1993 was operated for cui-ui spawning. Large amounts of water for cui-ui spawning were released from Derby Diversion Dam to Pyramid Lake during 1993. Modeled nutrient and total dissolved solids loadings to Pyramid Lake were also larger during 1993 as shown in table 5.

Calendar year 1993 had the most complete measured data sets, has large flow fluctuations, and has extreme 7-day low flows. Therefore, 1993 covers a range of conditions. Modeled data was compared to measured data with closeness-of-fit statistics and data plots.

Residual error and average error were the primary closeness-of-fit statistics used for comparison. Residual error indicates the average difference between simulated and observed values. Average error is calculated as the absolute value of the residual error summed over a specified period and divided by the number of days. Average error is always higher than

Table 5.—Comparison of	calibration simu	lated annual load	ings to Pyramid Lake
i abic c. Companioni ci	oundiantion online	area armiaar load	mids to i viallid Lake

	Loadings (kg/yr x 1,000)					
Condition	Calendar year	Phosphorus	Nitrogen	TDS		
Dry	1992	1	11	13,724		
Median	1989	2	24	18,316		
Median (cui-ui)	1993	8	94	33,297		
Wet	1986	28	236	101,228		

residual error since average error uses the absolute value of both positive and negative differences between modeled and observed values. Residual error is a better indication of calibration adequacy or closeness of fit because positive and negative values can cancel each other.

For temperature during the April to September period, residual error of less than 1 °C is excellent and less than 2 °C is good. Calculated temperature residual error was less than or equal to 2.0 °C, and typically less than 1 °C for all calibration years. For dissolved oxygen, less than 1 mg/L is excellent and less than 2 mg/L is good. Calculated minimum dissolved oxygen residual error was as high as 2.9 mg/L. For 1993, the year with the most complete and accurate data, minimum dissolved oxygen residual error was less than or equal to 0.8 mg/L. The statistics indicate a good dissolved oxygen calibration in most years; however, marginally adequate during extremely low flow conditions. However, only limited dissolved oxygen field data were available for comparison for years 1986, 1989, and 1992. Brock and Caupp summarize average error and residual error by river reach for the calibration years (RCR04-2.0, 2004, Chapter 8). Tables with closeness of fit statistics as well as plots of modeled versus observed data are provided.

Statistical error will reflect inadequacies in data measurement accuracy as well as deficiencies in the modeling calibration. Temperature measurement precision is limited to about 0.2 °C and dissolved oxygen measurement precision to about 0.2 mg/L.

The model calibration was adequate for comparing alternatives to No Action, the baseline condition. The temperature calibration is excellent to good in almost all years and locations. The dissolved oxygen calibration was fair with minimum dissolved oxygen concentrations matching observed data more closely than concentrations of maximum dissolved oxygen. Conservative substances such as total dissolved solids adequately matched observed data. Total nitrogen and total phosphorus concentrations followed expected trends.

Generally, the water quality calibration is better at upstream stations than at downstream stations. Uncertainties in input data sets and "round off" error accumulate in a downstream direction.

Low summer dissolved oxygen sags occur downstream from Reno primarily due to low flows and excessive nutrients, which result in an oxygen demand associated with accumulations of organic material.

# VI. WATER QUALITY MODEL VERIFICATION

Please note that due to limited time, the water quality model verification has not been peer reviewed. The contractor worked toward a calibration that matched or was better than the calibration used for the 1998 draft TROA EIS/EIR. Therefore, the following section is not complete and values or statistics reflect the 1998 draft. Prior to the public draft, this section will be updated to reflect the 2004 verification.

The following paragraphs of this section are from the 1998 draft and needs to be updated. After calibration, the water quality model was verified with the independent data set for calendar year 1991, a dry year, and 1995, which was on the moderately wet side. The model temperature verification was good to excellent. Calculated temperature residual error was less than or equal to 1.1 °C. The model dissolved oxygen calibration appeared marginal but was difficult to verify due to minimal measured dissolved oxygen data. Calculated minimum dissolved oxygen residual error was as high as -2.7 mg/L. Brock and Caupp (RCR04-3.0, 2004) provide a detailed analysis of model verification inputs and results.

Nine years of hydraulic and temperature data have been modeled when including calibration water quality years, verification water quality years, and fish temperature years, thereby greatly improving the reliability, robustness, and credibility of the DSSAMt model over a wide range of hydrologic and dynamic water quality conditions.

# VII. OVERVIEW OF WATER QUALITY SIMULATIONS

Tables and plots summarizing water quality inputs and outputs for river reaches downstream from Reno were prepared for the current condition simulation (Brock and Caupp, RCR04-4.0, 2004) and for the alternatives (Brock and Caupp, RCR04-6.0, 2004, RCR04-8.0, 2004, and RCR04-10.0). This included information on river and irrigation flows, weather, water temperature boundary conditions, water chemistry boundary conditions, annual plots of daily water temperature and dissolved oxygen, monthly water chemistry versus distance, statistical summaries of simulated water quality, water quality standards, seasonal constituent versus distance, and simulated constituent loads. Simulated constituents such as river temperature, dissolved oxygen, and nutrients provided information on the suitability for aquatic life. In general, temperature, high pH (an indicator of algae), DO, chloride, TDS, and total nitrogen violations occur downstream from Reno in mostly dry hydrologic conditions for all current and future conditions. During dry current and future conditions, dissolved oxygen concentrations are too low for adequate growth and maintenance of aquatic life. However, large non-scouring nutrient-rich flows followed by sudden drops in flow also results in more algal biomass and consequently lower DO. Lower flow results in larger minimum to maximum DO swings.

Truckee River watershed water quality was summarized in the Truckee River Water Quality Settlement Agreement - Federal Water Rights Acquisition Program, Final Environmental Impact Statement (Bureau of Indian Affairs, October 2002.)

Summary tables of the water quality books are shown as Water Quality Appendix DSSAMt tables 1 - 12.

# VIII. CURRENT CONDITION TEMPERATURE AND WATER QUALITY SIMULATIONS

The modeled current temperature (Brock and Caupp, RCR04-3.0, 2004) and water quality (Brock and Caupp, RCR04-4.0, 2004) conditions reflect simulated flows from the operations model and should not be compared to historical flows. Current conditions reflect current reservoir operations and current demands on the system

The current conditions simulation indicated that warm temperatures for fish and water quality problems exist minimally in wet, and mostly in median and dry hydrologic conditions. The most severe conditions occur during dry hydrologic conditions. Current system operations do not adequately accommodate water quality.

Temperature and DO were chosen as water quality indicators. Total phosphorus, orthophosphorus, total nitrogen, nitrate nitrogen, nitrite nitrogen, ammonia nitrogen, organic nitrogen, pH, total dissolved solids, and chloride were also modeled as supporting information for the water quality analysis.

Modeling and data indicated that water quality tends to be worse during the warm summer and early fall months. However, dissolved oxygen downstream from Derby Diversion Dam is low during the end of April 1989 for current conditions. Low flow and warm air temperatures caused the low DO. This indicates that water quality is highly variable making qualification of water quality conditions by season difficult.

Annual summaries of major model water quality parameters under current conditions are shown in tables DSSAMt 1 through 12 for each modeled reach downstream from Reno for wet (1986), median (1989), and dry (1992) calendar year conditions.

Based on summaries from the draft TROA EIS/EIR (1998), under dry year current conditions, annual summaries indicated that standards for TDS and chloride concentrations to Pyramid Lake, a terminal saline desert lake, are exceeded most of the year. Under dry year current conditions, annual summaries indicated that total nitrogen standards in the reach from Lockwood to Derby Diversion Dam are exceeded about one-third of the year.

# IX. No Action Alternative Temperature and Water Quality Simulations

No Action represents projected future conditions in the year 2033 without a Truckee River operating agreement or changes in system operation. The major change under No Action is

Table DSSAMt 1. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**Current Condition** 

Year: 1986 CY

1986 (wet) - RT86C1: Current Cond. 24-Feb-2004 Run:

Date of Run:

Constituent	Statistic	Reach						
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid	
pH pH	no. of days > STD no. of days < STD	0	0	0 0	0	29 0	66 0	
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0	0	0 0	0	0	5 5	
Chloride	no. of days > STD#	93	0	О	0	0	o	
Total Phosphorus	annual average	0.012	0.028	0.039	0.036	0.036	0.036	
Ortho Phosphorus	no. of days > STD	0						
Total Nitrogen	annual average no. of days > STD	0.177 1	0.260 1	0.315 1	0.287 1	0.290 2	0.298 4	
Nitrate Nitrogen	no. of days > STD	0	0	o	0	0	o	
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	2	
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	О	0	1	2	
Total Dissolved Solids	annual average# no. of days > STD#	70 1	92 0	108 0	100 0	113 0	121 0	
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	153 na 164 164	30 na 54 54	32 na 58 58	22 36 65 101	27 37 66 103	37 37 71 104	

Notes:

= number of days of the year when the standard was exceeded within any hour of the day no. of days

= determined for period November through June = total of 273 days if flows are adequate for spawning

na

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

= Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 2. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**Current Condition** 

Year:

1989 CY

Run:

1989 (median) - RT89C1: Current Cond. 24-Feb-2004

Date of Run:

Constituent	Statistic	Reach					
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	34 0	65 0	125 0	127 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0	0	0	9 6	10 10	25 28
Chloride	no. of days > STD#	123	0	0	0	8	11
Total Phosphorus	annual average	0.015	0.036	0.052	0.050	0.047	0.046
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.234 1	0.355 1	0.425 1	0.408 2	0.407	0.409 1
Nitrate Nitrogen	no. of days > STD	0	0	0	0	0	0
Nitrite Nitrogen	no. of days > STD	o	1	1	0	О	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	o	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	95 60	121 0	139 0	143 0	204 9	233 11
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	155 na 162 162	10 na 48 48	28 na 66 66	25 77 89 149	53 80 99 156	62 82 107 160

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

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DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

STD = Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 3. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**Current Condition** 

Year:

1992 CY

Run:

1992 (dry) - RT92C1: Current Cond 24-Feb-2004

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	16 0	160 0	94 0	244 0	3
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	107 107	109 109	149 104	296 253	172 156
Chloride	no. of days > STD#	366	95	97	363	364	365
Total Phosphorus	annual average	0.023	0.101	0.157	0.147	0.085	0.072
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.302 34	0.640 125	0.818 122	0.715 64	0.569 14	0.527 17
Nitrate Nitrogen	no. of days > STD	0	0	0	0	0	0
Nitrite Nitrogen	no. of days > STD	o	1	1	0	0	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	О	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	141 307	184 2	211 0	229 64	534 366	667 366
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	199 na 211 211	96 na 128 128	85 na 123 123	64 91 135 171	88 106 154 189	82 101 147 183

Notes:

= number of days of the year when the standard was exceeded within any hour of the day no. of days

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

= Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 4. Annual summary of simulated Truckee River quality compared to State of Nevada standards

No Action

Year:

1986 CY

Run:

1986 (wet) - RT86N1: No Action

Date of Run:

24-Feb-2004

Constituent	Statistic	Reach					
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw_	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	0	<b>15</b> 0	31 0	97 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	0	0 0	0	0	4 4
Chloride	no. of days > STD#	63	0	o	0	0	0
Total Phosphorus	annual average	0.013	0.030	0.042	0.039	0.039	0.039
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0. <b>1</b> 81 1	0.275 1	0.336 <b>1</b>	0.321 1	0.325 3	0.331 4
Nitrate Nitrogen	no. of days > STD	0	0	o	0	0	0
Nitrite Nitrogen	no. of days > STD	0	1	1 ]	0	0	1
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	o	0	1	1
Total Dissolved Solids	annual average# no. of days > STD#	69 2	92 0	108 0	106 0	119 0	126 0
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	146 na 156 156	25 na 53 53	32 na 58 58	20 36 64 100	27 37 66 103	

Notes:

= number of days of the year when the standard was exceeded within any hour of the day ло. of days

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not applicable

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

= desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout DESIRED

STD = Nevada State standard for Truckee River to protect beneficial uses

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RCR: D:\TROA\_03\WQ\Stand\NoAct\1986\RT86N1ST.qpw

08-Apr-04

RCR: TROA\_RDEISwqstds\_all12c.pdf

Table DSSAMt 5. Annual summary of simulated Truckee River quality compared to State of Nevada standards

No Action

Year:

1989 CY

Run:

1989 (median) - RT89N1: No Action

Date of Run:

24-Feb-2004

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	29 0	91 0	147 0	138 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	0	0 0	4 0	10 9	26 29
Chloride	no. of days > STD#	91	0	0	1	0	10
Total Phosphorus	annual average	0.016	0.040	0.056	0.051	0.048	0.047
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.244 1	0.381 1	0.463 1	0.441 2	0.435 3	0.435 1
Nitrate Nitrogen	no. of days > STD	0	0	0	0	О	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	96 60	123 0	143 0	146 0	196 0	227 8
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	160 na 168 168	24 na 60 60	32 na 70 70	22 77 89 149	54 80 100 157	62 82 107 160

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

STD = Nevada State standard for Truckee River to protect beneficial uses

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RCR: D:\TROA\_03\WQ\Stand\NoAct\1989\RT89N1ST.qpw

08-Apr-04

RCR: TROA\_RDEISwqstds\_all12c.pdf

Table DSSAMt 6. Annual summary of simulated Truckee River quality compared to State of Nevada standards

No Action

Year: 1992 CY

1992 (dry) - RT92N1: No Action 24-Feb-2004 Run:

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	128 0	63 0	181 0	0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	51 51	42 40	95 59	180 147	147 127
Chloride	no. of days > STD#	366	124	124	267	271	340
Total Phosphorus	annual average	0.029	0.086	0.125	0.118	0.089	0.082
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.332 123	0.630 63	0.777 72	0.693 43	0.598 29	
Nitrate Nitrogen	no. of days > STD	0	0	0	0	О	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	5	7
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	142 337	195 124	228 121	235 62	433 300	594 355
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	201 na 213 213	149 na 181 181	120 na 157 157	61 93 134 172	85 103 150 186	84 104 150 186

Notes:

= number of days of the year when the standard was exceeded within any hour of the day no. of days

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

STD = Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 7. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**LWSA** 

Year: Run:

1986 CY

1986 (wet) - RT86L1: LWSA 24-Feb-2004

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
рН	no. of days > STD	0	0	0	15	28	97
pH	no. of days < STD	ő	ő	ő	.0	0	) o
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	0 0	0 0	0 0	0	4 4
Chloride	no. of days > STD#	63	О	o	0	0	o
Total Phosphorus	annual average	0.013	0.030	0.042	0.039	0.039	0.039
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.179 1	0.273 1	0.335 1	0.319 <b>1</b>	0.324 3	0.329 3
Nitrate Nitrogen	no. of days > STD	0	0	0	0	0	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	1
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	1	1
Total Dissolved Solids	annual average# no. of days > STD#	69 2	92 0	108 0	106 0	119 0	126 0
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	146 na 156 156	25 na 53 53	32 na 58 58	20 36 64 100	27 37 66 103	37 39 72 106

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

па

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

= Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 8. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**LWSA** 

Year: 1989 CY

1989 (median) - RT89L1: LWSA 29-Feb-2004 Run:

Date of Run:

Constituent	Statistic			Reach			_
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	26 0	86 0	147 0	136 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0	0	0	4 0	10 9	26 30
Chloride	no. of days > STD#	91	0	О	1	0	10
Total Phosphorus	annual average	0.013	0.013	0.014	0.043	0.055	0.050
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.218 1	0.222 1	0.227 1	0.394 2	0.459 3	0. <b>44</b> 0 1
Nitrate Nitrogen	no. of days > STD	0	0	0	0	0	o
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	98 60	98 0	97 0	126 0	143 0	153 8
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	154 na 160 160	13 na 51 51	27 na 61 61	21 77 86 146	51 80 98 155	62 82 107 160

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not applicable

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

= Nevada State standard for Truckee River to protect beneficial uses STD

Table DSSAMt 9. Annual summary of simulated Truckee River quality compared to State of Nevada standards

LWSA

Year: Run:

**1992 CY (dry)** 1992 (dry) - RT92L1: LWSA 24-Feb-2004

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	103 0	54 0	182 0	0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0	46 46	39 39	97 57	177 140	149 125
Chloride	no. of days > STD#	366	184	185	293	272	341
Total Phosphorus	annual average	0.029	0.085	0.123	0.115	0.088	0.081
Ortho Phosphorus	no. of days > STD	0					}
Total Nitrogen	annual average no. of days > STD	0.333 123	0.660 93	0.830 93	0.733 65	0.615 30	0.604 32
Nitrate Nitrogen	no. of days > STD	0	o	О	0	0	0
Nitrite Nitrogen	no. of days > STD	О	1	1	0	5	7
Ammonia Nitrogen (unionized)	no. of days > STD	0	o	o	0	0	o
Total Dissolved Solids	annual average# no. of days > STD#	142 337	204 185	245 186	251 94	441 310	598 366
Temperature  Notes:	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	201 na 213 213	149 na 181 181	119 na 156 156	61 93 134 172	85 103 150 185	84 104 150 186

Notes:

= number of days of the year when the standard was exceeded within any hour of the day no. of days

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

STD = Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 10. Annual summary of simulated Truckee River quality compared to State of Nevada standards

TROA

Year: Run:

1986 CY

1986 (wet) - RT86T1: TROA 24-Feb-2004

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	0 0	13 0	17 0	102
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	0	0 0	0	0	0
Chloride	no. of days > STD#	93	31	31	30	0	0
Total Phosphorus	annual average	0.014	0.032	0.046	0.043	0.043	0.042
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.192 1	0.296 1	0.363 1	0.355 1	0.356 3	0.356 4
Nitrate Nitrogen	no. of days > STD	0	0	0	0	0	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	o	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	0	1
Total Dissolved Solids	annual average# no. of days > STD#	70 1	95 0	113 0	114 0	126 0	134 0
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	131 na 137 137	21 na 47 47	29 na 55 55	13 35 60 95	22 36 65 101	66

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

na

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

STD = Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 11. Annual summary of simulated Truckee River quality compared to State of Nevada standards

**TROA** 

Year: Run:

1989 CY

1989 (median) - RT89T1: TROA 26-Feb-2004

Date of Run: 2	6-Feb-20
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Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
рН рН	no. of days > STD no. of days < STD	0	0	<b>1</b> 9	81 0	140 0	141 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0 0	0	0	4	10 9	15 19
Chloride	no. of days > STD#	91	0	o	1	0	10
Total Phosphorus	annual average	0.016	0.039	0.055	0.049	0.047	0.046
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.241 1	0.374 1	0.453 1	0.432 2	0.429 3	0.429 1
Nitrate Nitrogen	no. of days > STD	0	0	О	0	0	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	o	0	0	o
Total Dissolved Solids	annual average# no. of days > STD#	96 60	121 0	140 0	143 0	193 0	223 8
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	154 na 157 157	14 na 51 51	28 na 63 63	21 77 89 149	53 79 99 155	62 82 107 160

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not applicable

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

DESIRED = desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout

= Nevada State standard for Truckee River to protect beneficial uses

Table DSSAMt 12. Annual summary of simulated Truckee River quality compared to State of Nevada standards

TROA

Year:

Run:

**1992 CY** 1992 (dry) - RT92T1: TROA 24-Feb-2004

Date of Run:

Constituent	Statistic			Reach			
		Glend-McCar	McCar-Lockw	Lockw-Derby	Derby-Wadsw	Wadsw-Numan	Numan-Pyramid
pH pH	no. of days > STD no. of days < STD	0	0	99 0	49 0	143 0	24 0
Dissolved Oxygen Dissolved Oxygen	no. of days < STD (5 or 6 mg/L) no. of days < 5 mg/L*	0	1 0	3 0	65 34	126 75	148 114
Chloride	no. of days > STD#	366	93	93	157	163	265
Total Phosphorus	annual average	0.027	0.078	0.114	0.108	0.087	0.083
Ortho Phosphorus	no. of days > STD	0					
Total Nitrogen	annual average no. of days > STD	0.313 123	0.592 63	0.736 64	0.662 40	0.583 9	0.573 9
Nitrate Nitrogen	no. of days > STD	0	0	o	0	0	0
Nitrite Nitrogen	no. of days > STD	0	1	1	0	0	0
Ammonia Nitrogen (unionized)	no. of days > STD	0	0	0	0	0	0
Total Dissolved Solids	annual average# no. of days > STD#	136 337	183 93	213 93	220 56	371 194	462 275
Temperature	no. of days > STD fish flow not adequate no. of days > STD fish flow adequate ^ no. of days > DESIRED fish flow not adequate no. of days > DESIRED fish flow adequate	189 na 191 191	81 na 139 139	87 na 133 133	49 90 <b>1</b> 25 164	75 98 145 180	78 100 146 182

Notes:

no. of days = number of days of the year when the standard was exceeded within any hour of the day

= determined for period November through June = total of 273 days if flows are adequate for spawning

= not a State Standard, included for information purposes only

= RMHQ (Recommended to Maintain High Water Quality) used in place of beneficial use standard

= desired condition if flows are adequate to protect juvenile Lahontan cutthroat trout DESIRED

STD = Nevada State standard for Truckee River to protect beneficial uses that population is expected to increase in the study area, which would increase municipal and industrial water demand. No Action serves as a baseline for comparison to the TROA Alternative.

Simulation of future conditions without TROA indicated warm temperatures for fish and water quality problems will exist minimally in wet and mostly in median and dry hydrologic conditions (Brock and Caupp, RCR04-5.0, 2004 and RCR04-6.0, 2004). Temperature, pH, DO, chloride, TDS, and total nitrogen violations will occur downstream from Reno. No Action is slightly worse than the current conditions due to larger future water demands, mostly due to population growth. The most severe conditions occur during dry hydrologic conditions. Without changes, current system operations will not adequately accommodate water quality in the future.

Annual summaries of major model water quality parameters under No Action are given in tables DSSAMt 4, 5, and 6 for each modeled reach downstream from Reno for wet (1986), median (1989), and dry (1992) calendar year conditions.

Annual summaries indicated that Truckee River TDS and chloride concentration standards downstream from Reno to Pyramid Lake, under dry year No Action conditions, are exceeded most of a dry year. Annual summaries indicated that total nitrogen in the reach from Lockwood to Derby Diversion Dam is exceeded about one quarter of the year.

# X. LOCAL WATER SUPPLY ALTERNATIVE TEMPERATURE AND WATER QUALITY SIMULATIONS

The Local Water Supply Alternative represents projected future conditions in the year 2033 without a Truckee River operating agreement; however, with some likely changes in system operation. Therefore, LWSA and No Action do not vary greatly. The primary differences between LWSA and No Action would be the source of water used for municipal and industrial purposes, extent of water conservation, implementation of a groundwater recharge program in Truckee Meadows, and assumptions regarding governmental decisions concerning approval of new water supply proposals.

Simulation of future conditions under LWSA indicated warm temperatures for fish and water quality problems will exist primarily in wet, average, and dry conditions (Brock and Caupp, RCR04-9.0, 2004 and RCR04-10.0, 2004). Temperature, pH, DO, chloride, TDS, and total nitrogen violations will occur downstream from Reno. LWSA is slightly worse than the current conditions due to larger future water demands mostly due to population growth. The most severe conditions occur during dry conditions.

Annual summaries of major model water quality parameters under the LWSA are given in tables 7, 8, and 9 for each modeled reach downstream from Reno for wet (1986), median (1989), and dry (1992) calendar year conditions.

Under dry year LWSA conditions, annual summaries indicated that TDS and chloride concentration standards downstream from Reno are exceeded more often than under

No Action. Under dry year LWSA conditions, annual summaries indicated that total nitrogen standards in the reach from Lockwood to Derby Diversion Dam are exceeded about one quarter of the year and again are exceeded more often than under No Action.

# XI. TROA ALTERNATIVE TEMPERATURE AND WATER QUALITY SIMULATIONS

The TROA Alternative represents a blended Truckee River operating agreement to accommodate the concerns of several negotiating parties. This alternative concentrates on implementing the requirements of the Preliminary Settlement Act (PSA). It provides drought relief for the Reno/Sparks area and enhances spawning flows for threatened and endangered fishes of Pyramid Lake. Under this alternative, current mandatory minimum instream flows would be met.

TROA provides a compromise of several resources and accommodates the needs of many users. Therefore, river temperatures and water quality would not be expected to be optimum for the nonhuman environment under TROA. However, from a water quality perspective, modeling indicated that TROA is better than No Action in most instances (Brock and Caupp, RCR04-7.0, 2004 and RCR04-8.0, 2004). The TROA Alternative appears to be the optimum alternative for the human environment.

Annual summaries of major model water quality parameters under TROA are given in tables DSSAMt 10, 11, and 12 for each modeled reach downstream from Reno for wet (1986), median (1989), and dry (1992) calendar year conditions.

Under dry year TROA conditions, annual summaries indicated that TDS and chloride concentration standards are exceeded less often than under No Action. Annual summaries indicated that total nitrogen standards in the reach from Lockwood to Derby Diversion Dam are exceeded less than one third of the year but less often than under No Action.

# XII. SIMULATED VERSUS PREFERRED WATER TEMPERATURES FOR FISH

Tables and plots summarizing fish temperature preferences for appropriate life stages of Truckee River fishes were prepared for the current condition simulation (Brock and Caupp, RCR04-3.0, 2004) and for the alternatives (Brock and Caupp, RCR04-5.0, 2004, RCR04-7.0, 2004, and RCR04\_9.0, 2004). These included temperature preference windows on plots of daily temperature for facilitating interpretation of the wealth of fish life stage information. Simulated daily instantaneous maximum temperatures indicated acute temperature effects on fish, whereas 7-day moving averages of maximum, mean, and minimum temperatures indicated chronic temperature effects. Life stages were separated into adult migration, spawning, incubation, larvae or rearing, juvenile maintenance, and adult maintenance. Fish species included rainbow trout, cui-ui, Lahontan cutthroat trout, mountain whitefish, and brown trout. Summary tables of the information for extremely wet, median,

and extremely dry ending years of a 5-year period for the current conditions and the alternatives (12 tables of five fishes and associated life stages from Chapter 6 of the Brock and Caupp fish temperature books) are included in the following WQ Appendix DSSAMt tables 13 through DSSAMt 24.

Simulated river temperatures were compared to preferred ranges. For each species and life stage of fish, the number of days that the simulated temperatures were within the recommended range was counted. The temperature was counted as having met the preferred criteria if the temperature was less than or equal to the maximum preferred temperature and greater than or equal to the minimum preferred temperature. These criteria are exceeded if the temperature curves pass through the bottom or top of the thermal box. The number of days that recommended temperatures were met during each fish life stage was given for the daily instantaneous maximum and maximum, mean, and minimum 7-day moving averages at six locations: East McCarron, Lockwood, Clark, Painted Rock, Dead Ox, and Marble Bluff Dam. These locations correspond to locations listed in the Nevada water temperature standards or critical locations determined by fishery biologists.

In general, during average and dry current and future conditions, recommended temperatures are exceeded for cold water and cool water fish. Recommended temperatures for warm water species such as cui-ui are exceeded, but much less frequently. During wet years in which cui-ui spawning runs occur, temperature requirements are often met during the high spring spawning flows. However, once flows are greatly reduced during summer and fall, preferred temperatures for cold water fish such as trout are exceeded frequently. Differences between alternatives were minimal in comparison to differences between wet, median, and dry years.

Summary tables of the water quality books are shown below as Water Quality Appendix DSSAMt tables 13 - 24.

## Truckee R. 1986wy (extremely wet) - Current Condition

#### Rainbow Trout

			East McCan	ran 96.7 k	m		Lockwood	d 1065 km			Clark	124 9 km	1	l	F	ainted Ro	ck 131.6 k	m .		Dead Ox	171 7 kn	n		Marble Blut	f 187,0 km	1
	Total	inst.	7-da	ay moving a	avg	Ins	7	-day moving	avg	Inst	7	day moving	avg	l	Inst.	7-0	day moving	avg	ins	7-	day moving	avg	Inst.	7-	day moving	avo
Life Stage	# Days	MAX	MAX	MEAN	MIN	MA	( MAX	MEAN	MIN	MA	K MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MA	( MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	46	39	41	41	33	35	38	44	37	31	36	46	39	ш	31	36	43	40	29	30	38	41	25	28	36	40
Spawning	32	25	27	24	13	21	24	29	19	17	22	30	20	ш	17	22	27	21	15	16	23	28	11	14	22	27
Incubation	62	32	36	40	39	24	27	44	37	20	22	40	37	ш	20	22	36	38	15	16	23	38	11	14	22	37
Rearing	183	178	183	176	173	18	183	183	183	177	183	183	178	Н	178	183	183	177	16	167	183	176	146	158	183	175
Juvenile Maint.	365	355	360	342	335	363	365	365	365	359	365	365	349	ш	360	365	361	347	34	349	358	345	328	340	358	342
Adult Maint	365	355	360	342	335	360	365	365	365	359	365	365	349	Н	360	365	361	347	34	349	358	345	328	340	358	342
														ш					1							

#### Cui-ui

	[		East McCar	ran 96.7 k	m		Lackwood	106.5 km			Clark	124.9 km			Painted	Rock 1316 k	m		Dead Ox	171.7 km	п		Marble Blu	ff 1870 kı	m
	Total	Inst	7-d	ay moving a	vg	Inst.	7-	day moving	avg	Inst.	Inst. ——7-day moving avg			Ins	t	7-day moving	avg	Inst.	<del></del> 7-	day moving	avg	Inst	7-	day moving	g avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M/	X MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
																		$\overline{}$							$\overline{}$
Adult Migration	150	78	83	45	35	83	85	54	38	74	79	58	44	7	78	59	45	63	63	58	47	58	59	51	45
Spawning	91	64	69	46	35	68	70	52	38	60	65	56	44	5	65	57	45	52	52	56	47	48	49	49	45
Incubation	91	71	71	46	35	76	76	52	38	77	77	56	44	7	7 77	57	45	74	76	62	47	74	75	65	47
Larvae	62	55	56	47	36	56	57	51	39	57	58	52	45	5	7 58	52	46	54	57	55	48	53	54	55	48
													- 1	-				1 -			-	**	•		

#### **Lahontan Cutthroat Trout**

	[		East McCar	ran 96.71	kIM		Lockwood	106.5 km			Clark	124.9 km			F	ainted Ro	ck 131.6 k	m		Dead Ox	171.7 km			Marble Bluf	f 187.0 km	n
	Total	Inst.		ay moving		inst.		day moving		Inst.							day moving	avg	Inst.	7-	day moving	avg .	inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						l								П												$\neg$
Adult Migration	136	100	102	114	102	98	102	107	111	96	101	96	106		95	100	96	101	94	98	94	95	92	99	93	92
Spawning	91	59	60	59	44	56	57	60	48	53	57	51	50		55	58	50	50	53	56	48	41	52	57	49	41
Incubation	91	59	60	59	44	56	57	60	48	53	57	51	50		55	58	50	50	53	56	48	41	52	57	49	41
Juvenile Maint.	107	88	95	96	92	94	98	103	96	81	91	105	96		82	92	107	97	74	83	107	98	57	60	107	96
Adult Maint.	365	338	338	331	309	349	349	339	334	340	343	336	333		338	339	335	333	326	330	335	332	323	332	335	331

#### Mountain Whitefish

Life Stage	Total # Days	inst	East McCar	тал 96.7 k ay moving a		lead		106.5 km		last	Clark	124.9 km		F		Painted Ro				Dead Ox	171.7 kr			Martxle Blu		
Life Stage	# Cays	MAX	MAX	MEAN	MIN	Inst.	MAX	day moving MEAN	MIN	inst. MAX	MAX	day moving MEAN	MIN	П	inst. MAX	MAX	MEAN	avg MIN	Inst. MAX	MAX	day moving MEAN	avg	MAX	MAX	day moving MEAN	avg
		1412-01	7500		9141	- IND US	nrot	IVILLAIV	141114	HILAN	Na Color	IN LAN	[81]]4	┉	IVIDA	INIXX	MICHI	IMILIA	MAA	IVIPA	MENN	MIN	MAX	MAA	MEAN	Min
Adult Migration	62	37	39	48	51	31	38	42	48	37	36	42	47		41	36	41	47	32	32	42	46	20	16	41	47
Spawning	47	24	23	36	33	28	26	30	39	32	28	27	37		27	24	27	35	27	21	29	35	26	22	28	34
Incubation	78	37	36	47	42	55	53	45	52	54	50	40	49		45	42	40	47	47	41	42	47	53	49	41	46
Incubation	74	74	74	74	70	71	74	74	74	72	74	74	74		74	74	74	74	74	74	74	74	74	74	74	74
Rearing	154	135	136	154	154	135	136	154	154	130	131	151	154		130	131	151	154	126	125	149	154	122	123	148	154
Juvenile Maint.	365	309	307	342	335	316	314	360	365	307	302	342	349		308	302	335	347	301	295	330	345	295	293	327	342
Adult Maint	365	309	307	342	335	316	314	360	365	307	302	342	349		308	302	335	347	301	295	330	345	295	293	327	342
	L													L												

#### **Brown Trout**

	[		East McCar	τan 96.7 k	m _		Lockwood	1065 km	1		Clark	124.9 km			Pair	nted Rock	131 6 km	п		Dead Ox	171,7 km	1		Marble Blut	ff 187.0 kr	m
	Total	Inst.		ay moving a	avg	Inst.	7	day moving	avg	Inst.	7-	day moving	avg	In	st	7-day	moving	avg	Inst	7-	day moving	ลงจ	insi.		day moving	
Life Stage	# Days	MAX MAX MEAN MIN				MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M	٩X	MAX I	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						_																				
Adult Migration	62	37	39	48	51	31	38	42	48	37	36	42	47	4	1	36	41	47	32	32	42	46	20	16	41	47
Spawning	32	15	14	30	29	13	11	20	31	17	13	19	31	1	7	14	20	30	16	10	24	31	11	7	22	31
Incubation	78	37	36	47	42	55	53	45	52	54	50	40	49	4	5	42	40	47	47	41	42	47	53	49	41	46
Incubation	74	74	74	74	70	71	74	74	74	72	74	74	74	7	4	74	74	74	74	74	74	74	74	74	74	74
Rearing	154	151	154	154	154	153	154	154	154	150	154	154	154	15	51	154	154	154	147	154	154	154	139	149	154	154
Juvenile Maint.	365	355	360	342	335	363	365	365	365	359	365	365	349	36	30	365	361	347	344	349	358	345	328	340	358	342
Adult Maint.	365	355	360	342	335	363	365	365	365	359	365	365	349	36		365	361	347	344	349	358	345	328	340	358	342
														"					",	0.15	555	545	020	040	350	342
							_																			

3,772

Number of Annual Degree Days (deg C)

Date of Truckee River Operating Model Analysis:

10-Feb-04

3,884

3,677

3,838

# Truckee R. 1966wy (median) - Current Condition

#### Rainbow Trout

			East McCar	man 967k	m		Lockwood	106.5 km			Clark	124.9 km			Painted Ro	ock 131.6 k	m		Dead Ox	171.7 km	1		Marble Bluf	ff 187.0 km	n
	Total	tnst.	7-d	lay moving a	avg	inst.	7	day moving	avg	Inst.	7-	day moving	avg	Inst.	7-	day moving	avg	Inst.	7-	day moving	avg	Inst	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
					$\neg \neg$									T .			-								
Adult Migration	46	40	44	46	46	36	43	46	46	30	34	46	46	29	32	45	46	20	22	35	46	6	0	31	46
Spawning	32	26	30	32	11	22	29	32	21	17	20	32	32	17	18	31	32	11	11	21	32	3	0	17	32
Incubation	62	34	32	55	41	24	29	50	47	18	20	32	52	17	18	31	47	11	11	21	32	3	0	17	32
Rearing	183	182	183	183	183	183	183	183	183	182	183	183	183	181	183	183	183	162	163	183	183	141	143	183	183
Juvenile Maint.	365	364	365	365	354	365	365	365	365	364	365	365	365	363	365	365	365	344	345	365	365	323	326	365	361
Adult Maint	365	364	365	365	354	365	365	365	365	364	365	365	365	363	365	365	365	344	345	365	365	323	325	365	361
																						1			

#### Cui-ui

	[		East McCar	ran <u>96</u> 7 k	m		East McCa	rran 967k	m		Clark	124 9 km			Painted R	ock 131 6 k	m		Dead Ox	171,7 kr	n		Marble Blu	ff 187 D kr	n
	Total	Inst.	7-d:			inst.		day moving		Inst		day moving		ins		-day moving		Inst.		day moving		Inst.	7	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MA	K MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX_	MEAN	MIN
Adult Migration	150	89	90	88	52	87	91	91	75	79	85	83	86	77	84	60	88	70	75	79	83	55	58	73	83
Spawning	91	76	77	86	52	72	76	88	75	68	74	80	85	67	74	77	87	57	61	75	81	41	41	69	81
Incubation	91	86	89	88	52	86	88	91	75	84	88	91	87	82	88	90	89	74	75	89	91	69	74	84	91
Larvae	62	57	59	62	51	57	58	62	62	55	58	62	62	53	58	60	62	44	45	59	62	39	44	54	62
	Į																								

## **Lahontan Cutthroat Trout**

	[		East McCar	ran 96.7 k	m		Lockwood	106 5 km			Clark	124.9 km	-		Pain	nted Ro	ck 131.6 kr	Ti .		Dead Ox	171.7 km	1		Marble Bluf	f 187.0 km	n
	Total	Inst.	7-da	ay moving a	avg	Inst.	7-	day moving	avg	Inst.	7	-day moving	avg	In	nst	7-d	lay moving	avg	Inst.	7-	day moving	avg	Inst.	77-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	М	ΙΑΧ	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														$\neg$								$\overline{}$				$\overline{}$
Adult Migration	136	65	72	94	95	59	65	99	96	53	53	83	92	4	49	51	80	88	32	36	51	79	33	31	42	75
Spawning	91	48	57	77	74	41	44	75	85	36	31	64	76	:	35	30	63	75	15	17	48	65	10	5	32	63
Incubation	91	48	57	77	74	41	44	75	85	36	31	64	76	1 :	35	30	63	75	15	17	48	65	10	5	32	63
Juvenile Maint.	107	102	107	107	100	103	107	107	107	96	100	107	107	9	93	99	107	107	72	72	107	107	53	54	107	107
Adult Maint.	365	364	364	343	320	365	365	361	346	362	362	354	343	3	60	360	354	341	343	346	351	336	325	325	352	328
	l			_																						

# Mountain Whitefish

	Total		East McCar					106.5 km			Clark	124.9 km			Р	ainted Roc	k 131.6 k	m		Dead Ox	171 7 kn	1		Marble Blut	f 187.0 kr	n
Life Stage	# Days	Inst.	7-di	ay moving a	avg	Inst.	7-	day moving	ávg	inst.	7-	day moving	avg		Inst.	7-d	ay moving	avg	Inst.	7-(	lay moving	avg	Inst.	7-	day moving	avg
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	N.	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
													$\overline{}$													$\overline{}$
Adult Migration	62	26	18	43	62	23	18	33	50	20	17	26	36		20	17	23	34	18	16	17	26	11	9	17	26
Spawning	47	32	28	47	47	29	26	45	47	33	28	44	46		33	29	42	45	33	25	36	44	29	24	35	44
Incubation	78	63	59	74	67	60	57	76	73	64	59	72	69		64	60	69	68	61	53	60	65	60	55	57	63
Incubation	74	71	74	64	52	68	71	74	69	71	74	74	68		72	74	74	68	71	74	74	68	71	74	74	66
Rearing	154	138	142	154	152	138	142	154	154	134	138	154	154		134	137	150	154	110	116	140	154	106	106	138	154
Juvenile Maint.	365	332	333	365	354	332	333	365	365	325	326	350	365		324	324	343	365	289	297	328	364	275	278	325	351
Adult Maint.	365	332	333	365	354	332	333	365	365	325	326	350	365		324	324	343	365	289	297	328	364	275	278	325	361

#### **Brown Trout**

			East McCarr	ran 967k	TD		Lockwood	106 5 km			Clark	124 9 km					<u>ck 13</u> 16 kı			Dead Ox	171.7 kr	TI		Marble Blut	f 1870 kr	n
	Total	inst	7-da			inst.	7-	day moving		Inst.		day moving						avg	Inst.	7-(	day moving	avg	Inst	7-	day moving	avg
Life Stage	# Days					MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	62	26	18	43	62	23	18	33	50	20	17	26	36		20	17	23	34	18	16	17	26	11	9	17	26
Spawning	32	17	13	32	32	14	11	30	32	18	13	29	31 (		18	14	27	30	18	10	21	29	14	9	20	29
Incubation	78	63	59	74	67	60	57	76	73	64	59	72	69		64	60	69	68	61	53	60	65	60	55	57	63
Incubation	74	71	74	64	52	68	71	74	69	71	74	74	68		72	74	74	88	71	74	74	68	71	74	74	66
Rearing	154	153	154	154	152	154	154	154	154	154	154	154	154		154	154	154	154	148	148	154	154	133	137	154	154
Juvenile Maint	365	364	365	365	354	365	365	365	365	364	365	365	365	- 1 - 3	363	365	365	365	344	345	365	365	323	325	365	361
Adult Maint,	365	364	365	365	354	365	365	365	365	364	365	365	365	- 1 - :	363	365	365	365	344	345	365	365	323	325	365	361

Number of Annual Degree Days (deg C)

10-Feb-04

4,323

RCR\_j\fROA\_03\Fish-Fishsum-FishTempSum4 wh3

3,485

rev 18-Feb-2004

Date of Truckee River Operating Model Analysis:

# Truckee R. 1992wy (extremely dry) - Current Condition

#### Rainbow Trout

11411110411														_											
			East McCa	rran 96.7	m	vood 1	06				Clark	124.9 km	1		Painted	Rock 131.6	km		Dead Ox	171.7 кл	n		Marble Bluf	ff 187.0 km	1
	Total	Inst.	7-0	ay moving	avg	Inst.		day moving	avg	Inst.	7	-day moving	j avg	ln:	st. ——	-7-day moving	g avg	Inst.	7-	day moving	avg	inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M/	X MA	X MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
											_							$\top$							
Adult Migration	46	3	0	14	34	1	0	5	26	1	0	3	17	(	0	3	17	1	a	3	13	0	0	3	25
Spawning	32	2	0	8	20	0	0	0	12	D	0	0	10	(	0	0	10	1	0	0	6	0	0	0	13
Incubation	62	2	0	13	44	0	D	O	15	0	0	0	18	1	0	0	16	1	0	0	12	0	0	D	27
Rearing	183	144	145	183	183	123	128	183	183	132	137	183	183	13	8 140	183	183	154	155	183	183	129	133	183	183
Juvenile Maint	365	326	327	365	348	305	310	365	365	314	319	365	365	32	0 322	2 365	365	335	337	365	362	306	315	365	365
Adult Maint,	365	326	327	365	348	305	310	365	365	314	319	365	365	32	0 322	365	365	335	337	365	362	306	315	365	365
									- 1					- 1											

#### Cui-ui

			East McCar	ran 96.7 k	m						Clark	124 9 km		P	ainted Ro	ck 131.6 km	n		Dead Ox	171.7 km	1		Marble Bluf	f 1870 km	n
	Total	Inst7-day moving avg				Inst.	7-	day moving	avg	Inst	7-<					láy moving :		Inst.		day moving				day moving	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
										T .															
Adult Migration	150	62	61	67	67	66	68	77	67	64	66	63	68	63	65	57	66	63	65	55	66	53	60	6₿	74
Spawning	91	30	29	64	67	27	29	48	64	29	31	42	65	28	30	39	64	29	31	39	61	19	24	42	69
Incubation	91	58	61	87	71	54	55	70	86	52	55	73	91	47	49	72	91	49	49	68	91	38	36	72	91
Larvae	62	29	31	58	62	24	25	40	57	22	25	44	62	18	19	43	62	20	19	39	62	9	6	43	62

#### **Lahontan Cutthroat Trout**

	Γ		East McCar	ran 96.7 k	rm		Lockwood	1 106 5 km	1		Clark	124 9 km	1		F	ainted Ro	ck 1316 kr	m		C	Dead Ox	171.7 km	1		Marble Blut	ff 1870 km	n
	Total	Inst.	7-d	ay moving a	avg	Inst	7	day moving	avg	Inst	7-	day moving	avg-	- [	Inst	7-0	ay moving	avg		nst.	7-0	lay moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	L	MAX	MAX	MEAN	MIN	l N	LAX_	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
					$\neg \neg$									Т					Т						_		
Adult Migration	136	54	67	67	87	52	59	72	77	56	60	70	67		49	52	66	68		50	54	65	67	37	35	68	71
Spawning	91	17	24	31	65	17	24	28	36	19	23	28	34		14	11	28	35		14	14	29	34	8	7	28	42
Incubation	91	17	24	31	65	17	24	28	36	19	23	28	34		14	11	28	35		14	14	29	34	8	7	28	42
Juvenile Maint	107	64	63	107	107	32	36	90	107	56	59	97	107		57	60	96	107		67	68	105	107	52	54	107	107
Adult Maint	365	328	337	324	309	311	317	365	365	323	323	365	357		329	328	351	329	;	341	343	342	315	311	318	361	337

## Mountain Whitefish

	Total						Lockwood	106 5 km			Clark	124.9 km			Painted F	Rock 131.6 k	m		Dead Ox	171 7 km	1		Marble Bluf	f 187.0 kr	n
Life Stage	# Days	Inst.	7-da	ay moving a		Inst.		day moving		Inst.			avg			-day moving		inst.		ay moving		Inst		day movi <b>ng</b>	avg
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	62	11	8	11	43	3	0	4	6	9	6	8	9	9	6	8	10	10	7	8	10	9	6	8	11
Spawning	47	31	27	35	39	18	15	16	24	27	23	28	32	28	24	30	36	30	28	35	36	25	21	31	36
Incubation	78	62	58	58	45	49	46	47	55	58	54	59	63	59	55	61	61	61	59	64	58	56	52	62	64
Incubation	74	59	64	63	52	55	60	73	74	60	62	74	74	58	58	73	64	61	63	64	55	54	55	71	64
Rearing	154	101	101	151	154	92	94	115	151	98	96	124	152	94	93	124	151	95	97	127	152	80	78	132	154
Juvenile Maint.	365	288	286	359	348	229	226	299	348	251	242	312	355	253	248	312	351	275	279	316	351	231	221	321	365
Adult Maint	365	288	286	359	348	229	226	299	348	251	242	312	355	253	248	312	351	275	279	316	351	231	221	321	365
	- 1					1																			- 1

#### **Brown Trout**

			East McCar	ran 967k	m		Lockwood	106.5 km			Clark	124 9 km			Pa	ainted Ro	ck 1316 kr	п		Dead Ox	171.7 kr	n		Marble Bluf	f 187.0 km	a
	Total	Inst.	7-d	ay moving a	avg	Inst	7-	day moving	avg	inst.	——-7-∢	day moving	avg	Г	Inst.	——-7-¢	day moving	avg	Inst.	7-	day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	$\perp$	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														$\neg$										_		
Adult Migration	62	11	В	11	43	3	0	4	6	9	6	8	9		9	6	8	10	10	7	8	10	9	6	8	11
Spawning	32	16	12	20	24	3	0	1	9	12	8	13	17		13	9	15	21	15	13	20	21	10	7	16	21
Incubation	78	62	58	58	45	49	46	47	55	58	54	59	63		59	55	61	61	61	59	64	58	56	52	62	64
Incubation	74	59	64	63	52	55	60	73	74	60	62	74	74		58	58	73	64	61	63	64	55	54	55	71	64
Reanno	154	128	134	154	154	117	122	154	154	121	130	154	154		125	133	154	154	137	143	154	154	114	126	154	154
Juvenile Maint	365	326	327	365	348	305	310	365	365	314	319	365	365		320	322	365	365	335	337	365	362	306	315	365	365
Adult Maint,	365	326	327	365	348	305	310	365	365	314	319	365	365		320	322	365	365	335	337	365	362	306	315	365	365

Number of Annual 4,127 5,197 4,812 4,722 4,816 4,715 Degree Days (deg C)

RCR j :TRGA\_03:Fish:Fishsum:FishTempSum4 wb3

rev \*8-Feb-2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

26

# Truckee R. 1986wy (extremely wet) - No Action

#### Rainbow Trout

			East McCan	ran 96.71	km .		Lockwood	1 106 5 km	1		Clark	124.9 km	·		Painted R	ock 131.6 k	m		Dead Ox	171 7 kn	n			ff 1870 km	
	Total	Inst.	7-da	pnivom vs	avg	Inst	7	day moving	avg	last.	7	day moving	avg	lost.	7	-day moving	avg	last.	7-	day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MiN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MiN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						$\top$																			
Adult Migration	46	39	41	41	33	32	38	46	38	31	36	45	40	31	35	43	40	28	30	38	41	25	28	36	39
Spawning	32	25	27	24	13	18	24	29	19	17	22	29	20	17	21	27	23	14	16	24	28	11	14	22	27
Incubation	62	32	36	40	39	21	27	44	37	19	22	39	37	20	21	36	40	14	16	24	38	11	14	22	37
Reanno	183	178	183	176	173	181	183	183	183	174	177	183	183	175	180	163	183	162	167	183	182	146	158	183	178
Juvenile Maint.	365	356	361	342	335	363	365	365	365	356	359	365	365	357	362	365	365	344	349	365	359	328	340	365	351
Adult Maint.	365	356	361	342	335	363	365	365	365	356	359	365	365	357	362	365	365	344	349	365	359	328	340	365	351

#### Cui-ui

Oui-ui			East McCarr	ran 96.7 k	cm		Lockwood	106.5 km			Clark	124_9 km			Pain	ted Ro	ck 131.6 km	1		Dead Ox	171 7 kn	m		Marble Bl	iff 187.0 k	m
	Total	Inst.	7-da	ay moving i	avg	Ins	7	day moving	avg	Inst	7-	day moving	avg	ti	nst. —	7-d	day moving a		Inst	7-	day moving	avg	Inst.		-day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MA	X MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M	IAX I	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
				40	0.5	-	2.0	-			70	60	45		70	77	60	46	64	64		40	64	60		40
Adult Migration	150	78	83	46	35	86	88	56	41	/3	76	62	45		72	60	62	45	54	69	50	49	61	62	92	46
Spawning	91	64	69	46	35	70	72	54	41	59	64	60	45		58	63	60	45	53	53	56	49	50	51	48	46
incubation	91	71	71	46	35	78	78	54	41	78	78	60	45		78	78	61	45	75	77	64	49	76	77	65	48
Larvae	62	55	56	47	36	57	58	52	42	57	58	54	46		57	58	54	46	55	58	55	49	54	55	55	48

## **Lahontan Cutthroat Trout**

	[		East McCar	ran 96.7 k	m		Lockwood	106.5 km			Clark	124 9 km			Р	ainted Ro	ck 131 6 kr	n		Dead Ox	171.7 kn	1		Marble Blu	ff 187.0 kr	n
	Total	inst	7-da	ay moving a	avg	Inst.	7-	day moving				day moving					day moving:		Inst		day moving		inst.		day moving	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN.	MIN		MAX	MAX	MEAN	MiN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
										l				Т					[							
Adult Migration	13 <del>6</del>	100	102	114	102	98	102	109	113	96	102	98	107		96	101	96	103	94	100	94	96	91	99	94	94
Spawning	91	59	60	59	44	56	57	61	48	53	57	51	51		54	57	51	50	55	57	49	44	51	57	52	43
Incubation	91	59	60	59	44	56	57	61	48	53	57	51	51		54	57	51	50	55	57	49	44	51	57	52	43
Juvenile Maint.	107	89	95	96	92	92	98	104	96	78	90	107	97		81	91	107	97	75	83	107	98	57	60	107	96
Adult Maint	365	339	339	332	315	365	365	362	343	358	362	345	336		354	356	342	336	33€	339	338	334	330	340	337	333

## Mountain Whitefish

	Total		East McCar	ran 96,7 k	m		Lockwood	106 5 km				Clark	124.9 km		ΙΓ	F	ainted Ro	ck 131.6 kr	TI		Dead Ox	171 7 km	п		Ma	arble Bluff	187.0 km	1
Life Stage	# Days	Inst.	7-da	ay moving a	avg	Inst.	7-	day moving	avg	Γ.	Inst.	7-0	day moving	avg	П	Inst.	7-0	day moving	avg	Inst		day moving	avg	- II	nst	7-0	lay moving	ávg
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	N	IAX	MAX	MEAN	MIN
										Т					П				1					Т				
Adult Migration	62	38	39	48	51	30	36	41	48		33	36	41	47	ш	40	36	41	46	29	32	41	46	1	21	18	43	47
Spawning	47	24	22	36	33	25	22	33	47		26	23	33	39		29	27	30	37	29	24	30	36	1.	25	22	31	36
Incubation	78	37	35	47	42	56	53	64	78		57	54	59	55	Н	58	56	53	50	56	51	49	49		56	52	50	48
Incubation	74	74	74	74	72	68	74	74	74		71	74	74	74	Н	72	74	74	74	74	74	74	74		74	74	74	74
Rearing	154	135	136	154	154	135	136	154	154		130	129	151	154	Ш	130	130	151	154	12€	125	149	154	1 1	122	123	148	154
Juvenile Maint	365	310	308	342	335	315	314	355	365		306	300	340	365		307	301	339	365	301	295	336	359	1 2	95	293	334	351
Adult Maint.	365	310	308	342	335	315	314	355	365		306	300	340	365		307	301	339	365	301	295	336	359	2	95	293	334	351
	Į														ΙL													

#### **Brown Trout**

	[		East McCar	ran 96,7 k	m		Lockwood	106 5 km			Clark	124 9 km			Painted Re				Dead Ox	171 7 km			Marble Blut	ff 187.0 km	п
	Total	Inst.	7-d	ay moving a	avg	Inst.	7-	day moving		Inst.	<del></del> 7-€		avg			day moving		tnst			avg	Inst.		day moving	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN.	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
																					1		_		
Adult Migration	62	38	39	48	51	30	36	41	48	33	36	41	47	40	36	41	46	29	32	41	46	21	18	43	47
Spawning	32	15	13	30	29	10	7	18	32	11	8	18	31	14	12	18	30	14	9	22	31	10	7	22	32
Incubation	78	37	35	47	42	56	53	64	78	57	54	59	55	58	56	53	50	56	51	49	49	55	52	50	48
Incubation	74	74	74	74	72	68	74	74	74	71	74	74	74	72	74	74	74	74	74	74	74	74	74	74	74
Rearing	154	151	154	154	154	153	154	154	154	149	154	154	154	149	154	154	154	147	154	154	154	139	149	154	154
Juvenile Maint,	365	356	361	342	335	363	365	365	365	356	359	365	365	357	362	365	365	344	349	365	359	328	340	365	351
Adult Maint.	365	356	361	342	335	363	365	365	365	356	359	365	365	357	362	365	365	344	349	365	359	328	340	365	351

Number of Annual Degree Days (deg C)

,00

3913

3942

RCR\_ptTROA\_03/Fish:Fishsum\FishTempSum4 wti3

rev 18 Feb 2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

RCR. 1

27

# Truckee R. 1966wy (median) - No Action

#### Rainbow Trout

Kallibow	HOUL															_									
			East McCar	ran 967 k	km .		Lockwood	106.5 km			Clark	124.9 km	1		Painted Ro	ock 131.6 k	m		Dead Ox	171 <b>7</b> kл	n		Marble Bluf	ff <u>1870</u> kп	n
	Total	Inst.	7-d	ay moving a	avg	inst.	7-	day moving	avg	Inst	7.	day moving	avg	Inst.	7-	day moving	avg	lnst.	7-	day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
-																									
Adult Migration	46	36	41	46	46	30	35	46	46	21	28	45	46	21	28	40	46	7	1	31	43	2	0	27	42
Spawning	32	22	27	32	16	18	21	32	28	12	14	31	32	12	14	26	32	4	1	17	29	1	0	13	28
Incubation	62	24	27	55	46	19	21	44	54	12	14	31	47	12	14	26	37	4	1	17	29	1	D D	13	28
Rearing	183	182	183	183	183	183	183	183	183	181	183	183	183	180	183	183	183	161	162	183	183	139	141	183	183
Juvenile Maint.	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365
Adult Maint,	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365
						1												1			- 1				

#### Cui-ui

			East McCan	ran 96.7 k	m		Lockwood	1065 km			Clark	124.9 km			Painti	ed Rock	131,6 km	η		Dead Ox	171 7 km	1		Marble Blu	ff 187.0 kr	n
	Total	Inst.	7-da	ay moving a	svg	Inst.	7	day moving			7-	day moving						avg				avg			-day moving	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	N	AX M	IAX I	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	150	87	90	87	57	89	95	95	86	77	82	84	90		76	79	82	89	59	70	71	79	43	41	68	82
Spawning	91	73	76	85	57	70	75	87	85	62	66	77	88		61 (	5 <b>4</b>	76	87	46	55	67	77	29	23	63	80
Incubation	91	86	88	88	57	85	88	91	85	82	87	90	90		82	86	90	91	71	75	87	91	62	65	82	91
Larvae	62	57	58	62	55	56	58	62	62	53	57	60	62		52	56	60	62	41	45	57	62	32	35	52	62

#### **Lahontan Cutthroat Trout**

	Г		East McCar	ran 96.7 k	m		Lockwood	106.5 km			Clark	124.9 km		] [	P	ainted Ro	ck 131.6 km	n		Dead Ox	171.7 kr	n		Marble Bluf	187.0 km	
	Total	inst.	7-d	ay moving a	avg	Inst.	7-	day moving	avg	Inst		day moving	avg	1 [	Inst.		ay moving		inst	7	day moving		inst		day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	Ш	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														П												
Adult Migration	136	58	63	94	96	59	60	97	102	44	50	73	90	ш	42	48	65	84	37	35	42	70	35	34	41	67
Spawning	91	40	46	76	74	32	31	70	82	24	23	58	75	ш	22	23	54	69	11	12	29	61	6	a	23	60
Incubation	91	40	46	76	74	32	31	70	82	24	23	58	75	П	22	23	54	69	11	12	29	61	6	0	23	60
Juvenile Maint.	107	102	107	107	101	103	107	107	107	94	100	107	107	H	94	97	107	107	71	71	107	107	47	50	107	107
Adult Maint	365	356	356	327	301	365	365	364	352	365	365	356	342	H	364	364	352	339	346	349	347	332	324	328	344	324
	- 1				- 1									H				1								

#### Mountain Whitefish

	Total		East McCar	тап 96.7 k	m	$\Gamma$	Lockwood	1 106.5 km			Clark	124.9 km	n	lΓ	F	ainted Ro	ck 131.6 k	m		Dead Ox	171.7 kr	n		Marble Blut	f 187.0 kr	n
Life Stage	# Days	Inst	7-d	ay moving a	pγg	Inst.	7-	day moving	avg	Inst	7	-day moving	g avg	ΙГ	Inst.	7-	lay moving	avg	lns	. —	7-day moving	avg	Inst.	<del></del> 7	day moving	avg
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MA	K MAX	MEAN	MIN	Ш	MAX	MAX	MEAN	MIN	MA	X MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														П					Т							$\overline{}$
Adult Migration	62	22	17	42	62	20	17	19	45	18	16	18	31	ш	18	16	17	30	15	15	16	20	9	7	16	22
Spawning	47	29	31	46	47	24	18	45	46	31	27	39	45	ш	31	28	38	45	31	24	34	44	28	22	33	44
Incubation	78	60	62	75	68	55	49	76	77	62	58	70	73	ш	62	59	69	73	62	55	62	67	59	53	59	65
Incubation	74	64	68	53	28	65	70	74	74	71	73	74	67		71	74	73	66	71	74	71	63	71	73	70	58
Rearing	154	137	141	154	153	135	139	154	154	132	135	149	154		132	135	145	154	11	107	140	154	102	104	137	154
Juvenile Maint	365	331	332	360	341	330	330	365	365	323	323	346	365	ш	322	323	338	365	29	288	328	365	271	276	325	365
Adult Maint.	365	331	332	360	341	330	330	365	365	323	323	346	365		322	323	338	365	29	288	328	365	271	276	325	365
										1				1					1							

#### **Brown Trout**

	[		East McCar	ran 967k	ım		Lockwood	106.5 km		_	Clark	124 9 km			Painted Re	ock 131 6 k	m		Dead Ox	171 7 km	0		Marble Blu	ff 187.0 kr	П
	Total	Inst	7-da	ay moving a	avg	Inst.	7-	day moving	avg	inst	7-	day moving	avg	Inst.	7-	day moving	avg	Inst.	77-	day moving	avg	Inst.	77-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														1. —											
Adult Migration	62	22	17	42	62	20	17	19	45	18	16	18	31	18	16	17	30	15	15	16	20	9	7	16	22
Spawning	32	14	16	31	32	9	5	30	31	16	12	24	30	16	13	23	30	16	9	19	29	13	7	16	29
Incubation	78	60	62	75	68	55	49	76	77	62	58	70	73	62	59	69	73	62	55	62	67	59	53	59	65
incubation	74	64	68	53	28	65	7D	74	74	71	73	74	67	71	74	73	66	71	74	71	63	71	73	70	58
Rearing	154	153	154	154	153	154	154	154	154	153	154	154	154	153	154	154	154	147	147	154	154	131	135	154	154
Juvenile Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365
Adult Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365

Number of Annual 3466 3063 4,18 4,173 4,44 4,413 Degree Days (deg C)

RCR\_j1TROA\_63%rishvFishsumvFishTempSum4\_wb3

rev 18 Feb 2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

28

\*\*Provisional Data\*

17-Feb-2004

# Truckee R. 1992wy (extremely dry) - No Action

#### Rainbow Trout

1141110011																									
			East McCar	rran 9671	(F)		Lockwoo	106.5 km			Clark	124 9 km	1		Painted Ro	ock 131.6 k	m		Dead Ox	171.7 km	1		Marble Bluf	ff 1870 km	n
	Total	Inst.	7-d	lay moving	avg	Inst	7	day moving	avg	inst.	7	day moving	avg	Inst.	7-	day moving	avg	Inst.	~~~~7≺	day moving	avgpvs	Inst.	7-	day moving	avq
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						$\overline{}$				$\overline{}$							-								-
Adult Migration	46	3	D	12	33	1	0	1	19	0	٥	2	11	0	0	2	11	1	0	3	12	0	0	3	25
Spawning	32	2	0	6	19	0	0	0	11	0	0	0	4	D	0	0	4	1	0	D	5	0	0	D	13
Incubation	62	2	0	11	42	0	0	0	11	a	0	D	9	0	0	0	9	1	0	D	11	0	0	0	28
Rearing	183	143	148	183	183	126	129	183	183	133	136	183	183	142	141	183	183	153	154	183	183	129	131	183	183
Juvenile Maint.	365	325	330	365	350	308	311	365	365	315	318	365	365	324	323	365	365	334	336	365	365	306	313	365	365
Adult Maint	365	325	330	365	350	308	311	365	365	315	318	365	365	324	323	365	365	334	336	365	365	306	313	365	365

#### Cui-ui

			East McCar	rran 96.7 J	km		Lockwood	106.5 km			Clark	124.9 km	n	lΓ	F	Painted Ro	ck 1316 km	n		Dead Ox	171 7 kr	1		Marble Blu	iff 1870 km	n
	Total	Inst.	7-d	lay moving	avg	Inst.	7	day moving	à√g	Inst.	7-	day moving	g avg	1	Inst.	7-c	ay moying.	avg	Inst.	7-	day moving	avg	Inst.	7	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	Ш	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
					$\overline{}$							_		П					_							
Adult Migration	150	61	60	66	69	82	84	83	95	65	66	71	78		63	65	67	66	63	65	59	67	53	60	68	73
Spawning	91	29	28	63	69	26	28	39	62	29	30	37	61		28	30	37	58	29	31	40	61	19	24	41	68
Incubation	91	57	61	87	74	49	50	69	81	48	51	71	91		50	52	69	68	50	51	69	91	38	36	71	91
Larvae	62	28	31	58	62	19	20	39	52	18	21	42	62		21	22	40	59	21	21	40	62	9	6	42	62
		MAX MAX MEAN MIN 61 60 66 69 29 28 63 69 57 61 87 74							1									-					_			

#### Lahontan Cutthroat Trout

	Г		East McCar	ran 967k	m		Lockwood	106 5 km			Clark	124 9 km			Painted	Rock 131.	km		Dead Ox	171 7 kr	n		Marble Bluf	ff 187.0 km	m T
	Total	Inst.	7-da	ay moving a	avg	Inst	7-	day moving	avg	Inst.	7-	day moving	avg		Inst. —	7-day movi	ng avg	Inst	7	day moving	avg	Inst.	77-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	N	MAX MA	X MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
																									$\overline{}$
Adult Migration	136	52	60	66	85	44	42	70	73	48	53	71	74		46 5	72	67	50	53	65	67	37	35	68	72
Spawning	91	14	24	31	65	9	12	26	32	15	15	28	31		14 14	28	32	14	13	29	34	8	7	28	41
Incubation	91	14	24	31	65	9	12	26	32	15	15	28	31		14 14	28	32	14	13	29	34	8	7	28	41
Juvenile Maint	107	65	65	107	107	32	32	90	107	55	59	96	107		59 6	95	107	66	68	107	107	53	54	107	107
Adult Maint.	365	331	335	325	309	313	318	365	365	323	323	365	365	1 :	333 33	1 365	365	342	345	345	326	311	318	364	338
																								•••	000

## Mountain Whitefish

	Total		East McCan					106 5 km			Clark	124.9 km			F	ainted Ro	ck 131.6 k	m		Dead Ox	171.7 km	1		Marble Bluf	187.0 km	1
Life Stage	# Days		7-da			inst.		day moving		last		day moving			Inst		day moving			7-	day moving	avg	Inst.	7-	day moving	avg
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	62	11	8	11	42	1	0	3	5	9	6	7	9		9	6	7	9	10	7	8	10	9	6	8	11
Spawning	47	30	27	34	39	3	0	2	13	25	19	25	29		26	22	27	30	30	28	35	35	25	21	31	36
Incubation	78	61	58	58	45	15	12	33	44	56	50	56	60		57	53	58	61	61	59	66	60	56	52	62	64
incubation	74	59	63	63	52	26	24	48	65	55	55	65	74		56	56	70	74	60	63	66	57	54	55	71	66
Rearing	154	102	102	150	154	90	91	115	152	94	95	123	152		96	98	123	149	94	98	127	152	80	78	132	154
Juvenile Maint.	365	288	286	354	350	226	223	290	348	244	239	311	354		256	254	311	348	273	280	316	354	231	221	323	365
Adult Maint.	365	288	286	354	350	226	223	290	348	244	239	311	354		256	254	311	348	273	280	316	354	231	221	323	365
	Į													L												

#### **Brown Trout**

	[		East McCar	ran 96.7 l	(m)		Lockwood	106 <u>5</u> km			Clark	124 9 km			Pa	unted Roo	ck 131.6 kr	n		Dead Ox	171 7 km	П		Marble Bluf	1870 kr	η
	Total	Inst.		ay moving.		Inst	7-	day moving		Inst	7-	day moving	avg		Inst	7-d	ay moving	avg	Inst.	7-	day moving	avg	Inst.	7-	ay moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														7												
Adult Migration	62	11	8	11	42	1	0	3	5	9	6	7	9		9	6	7	9	10	7	8	10	9	6	8	11
Spawning	32	15	12	19	24	0	a	0	0	10	6	10	14		11	8	12	15	15	13	20	20	10	7	16	21
Incubation	78	61	58	58	45	15	12	33	44	56	50	56	60		57	53	58	61	61	59	66	60	56	52	62	64
Incubation	74	59	63	63	52	26	24	48	65	56	55	65	74		56	56	70	74	60	63	66	57	54	55	71	66
Rearing	154	128	140	154	154	119	123	154	154	122	129	154	154		129	134	154	154	137	143	154	154	114	124	154	154
Juvenile Maint	365	325	330	365	350	308	311	365	365	315	318	365	365		324	323	365	365	334	336	365	365	306	313	365	365
Adult Maint.	365	325	330	365	350	308	311	365	365	315	318	365	365		324	323	365	365	334	336	365	365	306	313	365	365
							_																	•		1

Number of Annual 4,151 Degree Days (deg C)

RCR\_jftROA\_03(FishtFishsum)FishTempSum4 wb3

rev 18-Feb-2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

# Truckee R. 1986wy (extremely wet) - LWSA

#### Rainbow Trout

Rainibon														_												
	[		East McCar	rran 967 k	m		Lockwood	d 106.5 km			Clark	124 9 km	1	L	Р	Painted Ro	ck 131,6 ki	n		Dead Ox	171.7 km	n		Marble Bluf	187 0 kr	m
	Total	Inst	7-d	lay moving	avg	Inst	7	-day moving	avg	Inst		day moving	avg	ìΓ	Inst.	7<	day moving	avg	inst.	<del></del> 7-	day moving	avg	Inst.		day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MiN	MAX	MAX	MEAN	MIN	ш	MAX	MAX	MEAN	MiN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						$\top$								П												
Adult Migration	46	39	41	41	33	32	38	46	38	31	36	45	40	ш	31	35	43	40	28	30	38	41	25	28	36	39
Spawning	32	25	27	24	13	18	24	29	19	17	22	29	20	ш	17	21	27	23	14	16	24	28	11	14	22	27
Incubation	62	32	36	40	39	21	27	44	37	19	22	39	37	ш	20	21	36	40	14	16	24	38	11	14	22	37
Rearing	183	178	183	176	173	181	183	183	183	174	177	183	183	ш	175	180	183	183	162	167	183	182	146	158	183	178
Juvenile Maint	365	356	361	342	335	363	365	365	365	356	359	365	365	ш	357	362	365	365	344	349	365	359	328	340	365	350
Adult Maint	365	356	361	342	335	363	365	365	365	356	359	365	365	H	357	362	365	365	344	349	365	359	328	340	365	350
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	ſ		East McCar	ran 96.7 k	m		Lockwood	106 5 km			Clark	124.9 km				ock 1316 k			Dead Ox	<u>171,7 kr</u>	m				187.0 km	
	Total	inst	7-d	ay moving a	BVg	Inst.	7-	day moving	avg	inst.	7-	day moving	avg	inst.	7	day moving	avg	Inst	7	day moving	avg	- h	nst -	7-d	ay moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MA)	MAX	MEAN	MIN	N.	MAX	MAX	MEAN	MiN
					$\neg \neg$																					
Adult Migration	150	78	83	46	35	86	88	56	41	73	78	62	45	72	77	62	45	64	64	58	49		61	62	52	46
Spawning	91	64	69	46	35	70	72	54	41	59	64	60	45	58	63	60	45	53	53	56	49		50	51	48	46
Incubation	91	71	71	46	35	78	78	54	41	78	78	60	45	78	78	61	45	75	77	64	49		76	77	65	48
Larvae	62	55	56	47	36	57	58	52	42	57	58	54	46	57	58	54	46	55	58	55	49		54	55	55	48
																							$\overline{}$			

## **Lahontan Cutthroat Trout**

	Г		East McCar	ran 96.7 k	m		Lockwood	106.5 km	1		Clark	124 9 km		Pi	ainted Ro	ck 131.6 kr	n		Dead Ox	171,7 кл	1		Marble Blut	f 187.0 ki	m
	Total	Inst	7-da	ay moving a	170	Inst.	7-	day moving	avg	inst.	7.	day moving	avg			lay moving	avg			day moving	avg	Inst.	7-		g avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MÉAN	MIN	 MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	136	100	102	114	102	98	102	109	113	96	102	98	107	96	101	96	103	94	100	94	96	92	100	94	94
Spawning	91	59	60	59	44	10-Feb	-04			53	57	51	51	54	57	51	50	55	57	49	44	51	57	52	43
Incubation	91	59	60	59	44	56	57	61	48	53	57	51	51	54	57	51	50	55	57	49	44	51	57	52	43
Juvenile Maint.	107	89	95	96	92	92	98	104	96	78	90	107	97	81	91	107	97	75	83	107	98	57	60	107	96
Adult Maint.	365	339	339	332	315	365	365	364	343	358	362	346	336	354	356	343	336	336	339	338	334	330	340	337	333

## Mountain Whitefish

	Total		East McCar			L	Lockwood			laat	Clark	124,9 km day moving		IF	Inst		ck 1316 ki		Ins	Dead Ox	171 7 km day moving		inst		ff 187.0 km	
Life Stage	# Days	inst MAX	MAX	ay moving a MÉAN	MIN	Inst. MAX	MAX	day moving MEAN	MIN	Jost. MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MA		MEAN	MIN	MAX	MAX	MEAN	WIM
Adult Migration Spawning Incubation Incubation Rearing Juvenile Maint, Adult Maint,	62 47 78 74 154 365 365	38 24 37 74 135 310 310	39 22 35 74 136 308 308	48 36 47 74 154 342 342	51 33 42 72 154 335 335	30 25 56 68 135 315 315	36 22 53 74 136 314 314	41 33 64 74 154 355 355	48 47 78 74 154 365 365	33 26 57 71 130 306 306	36 23 54 74 129 300 300	41 33 59 74 151 340 340	47 39 55 74 154 365 365		40 29 58 72 130 307 307	36 27 56 74 130 301 301	41 30 53 74 151 339 339	46 37 51 74 154 365 365	29 29 56 74 12 30 30		41 30 49 74 149 336 336	46 36 49 74 154 359 359	17 25 55 74 122 295 295	14 22 52 74 123 293 293	41 29 48 74 148 334 334	47 36 48 74 154 350 350

#### **Brown Trout**

Number of Annual

30

	t t	asi McCan	nan 967 kr	m.	1	Lockwood	106.5 km			Clark	124.9 km			Pa	ainted Ro	ck 131.6 kr	R		Dead Ox	<u>17</u> 1 7 kr	TI		vtartxle Bluf	1870 km	1
Total	Inst.	7-da	ay moving a	vg	Inst	7-	lay moving:	avg	Inst.	———7-												inst.			
# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
62 32 78 74 154 365 365	38 15 37 74 151 356 356	39 13 35 74 154 361 361	48 30 47 74 154 342 342	51 29 42 72 154 335 335	30 10 56 68 153 363 363	36 . 7 . 53 . 74 . 154 . 365 . 365	41 18 64 74 154 365 365	48 32 78 74 154 365 365	33 11 57 71 149 356 356	36 8 54 74 154 359 359	41 18 59 74 154 365 365	47 31 55 74 154 365 365		40 14 58 72 149 357 357	36 12 56 74 154 362 362	41 18 53 74 154 365 365	46 30 51 74 154 365 365	29 14 56 74 147 344 344	32 9 51 74 154 349 349	41 22 49 74 154 365 365	46 31 49 74 154 359 359	17 10 55 74 139 328 328	14 7 52 74 149 340 340	41 21 48 74 154 365 365	47 32 48 74 154 350 350
	# Days 62 32 78 74 154 365	# Days MAX  62 38 32 15 78 37 74 74 154 151 365 356	# Days MAX MAX  62 38 39 32 15 13 78 37 35 74 74 74 151 154 365 356 351	# Days MAX MAX MEAN  62 38 39 48 32 15 13 30 78 37 35 47 74 74 74 74 74 154 151 154 154 365 356 351 342	# Days MAX MAX MEAN MIN  62 38 39 48 51 32 15 13 30 29 78 37 35 47 42 74 74 74 74 72 154 151 154 154 154 366 356 361 342 335	# Days MAX MAX MEAN MIN MAX  62 38 39 48 51 30 32 15 13 30 29 10 78 37 35 47 42 56 74 74 74 74 72 68 154 151 154 154 154 366 356 361 342 335 363	#Days MAX MAX MEAN MIN MAX MAX  62 38 39 48 51 30 36 32 15 13 30 29 10 7 78 37 35 47 42 56 53 74 74 74 74 72 68 74 154 151 154 154 154 153 154 366 356 361 342 335 363 365	#Days MAX MAX MEAN MIN MAX MAX MEAN  62 38 39 48 51 30 36 41 32 15 13 30 29 10 7 18 78 37 35 47 42 56 53 64 74 74 74 74 74 72 68 74 74 154 151 154 154 154 154 153 154 154 365 356 361 342 335 365 363 365 365	# Days MAX MAX MEAN MIN MAX MAX MEAN MIN  62 38 39 48 51 30 36 41 48 32 32 15 13 30 29 10 7 18 32 78 37 35 47 42 56 53 64 78 74 74 74 74 77 72 68 74 74 74 74 74 154 151 154 154 154 153 154 154 155 365 365 361 342 335 365 365 365 365 365 365 365 365	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX  62 38 39 48 51 30 36 41 48 33 32 15 13 30 29 10 7 18 32 11 78 37 35 47 42 56 53 64 78 57 74 74 74 74 72 68 74 74 74 71 154 151 154 154 154 153 154 154 154 154 365 365 365 365 365 365 365	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX  62 38 39 48 51 30 36 41 48 33 36 32 15 13 30 29 10 7 18 32 11 8 78 37 35 47 42 56 53 64 78 57 54 74 74 74 74 72 68 74 74 74 74 71 74 154 151 154 154 154 154 154 154 154 15	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN  62 38 39 48 51 30 36 41 48 32 11 8 18  32 15 13 30 29 10 7 18 32 11 8 18  78 37 35 47 42 56 53 64 78 57 54 59  74 74 74 74 74 72 68 74 74 74 74 71 74 74  154 151 154 154 154 154 153 153 154 154 154 149 154 154  366 356 361 342 335 363 365 365 365 365 366 359 365	#Days MAX MAX MEAN MIN MAX MEAN MIN MAX MEAN MIN MAX MEAN MIN MEAN MEAN MIN MEAN MIN MEAN MEAN MEAN MEAN MEAN MEAN MEAN MEA	#Days MAX MAX MEAN MIN MIN MAX MAX MEAN MIN MIN MAX MAX MEAN MIN MIN MIN MAX MAX MEAN MIN MIN MIN MIN MIN MIN MIN MIN MIN MI	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MEAN MIN MAX  62 38 39 48 51 30 36 41 48 33 36 41 47 40  32 15 13 30 29 10 7 18 32 11 8 18 31 14  78 37 35 47 42 56 53 64 78 57 54 59 55 58  74 74 74 74 74 72 68 74 74 74 74 71 74 74 74 72  154 151 154 154 154 154 153 153 154 154 154 149 154 154 154 149  365 356 361 342 335 363 365 365 365 365 365 365 365 365	#Days MAX MAX MEAN MIN MAX MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MAX MEAN MIN MAX M	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MEAN MEAN MEAN MEAN MEAN MEAN MEAN	#Days MAX MAX MEAN MIN MEAN MIN MAX MAX MEAN MIN MEAN MIN MAX MAX MEAN MIN MEAN MEAN MIN MEAN MIN MEAN MIN MEAN MEAN MEAN MEAN MEAN MEAN MEAN MEA	#Days MAX MAX MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MAX MEAN MIN MEAN MIN MAX MEAN MEAN MIN MAX MEAN MIN	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MIN MAX MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MEAN MIN MIN MAX MEAN MIN MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MIN MAX MEAN MIN MA	#Days MAX MAX MEAN MIN MEAN MEAN MEAN MIN MEAN MEAN MIN MEAN MEAN MEAN MEAN MEAN MEAN MEAN MEA	#Days MAX MAX MEAN MIN	#Days MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MIN MAX MEAN MEAN MIN MAX MEAN MEAN MIN MAX MEAN MIN	#Days MAX MAX MEAN MIN MAX MEAN MEAN MIN MAX MEAN MIN MEAN MIN MAX MEAN MAX MEAN MIN MAX MEAN MA	#Days MAX MAX MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MEAN MIN MAX MAX MEAN MIN MAX MAX MEAN MEAN MEAN MEAN MEAN MEAN MEAN MEAN

Date of Truckee River Operating Model Analysis:

3,913

10-Feb-04

3,948

17-Feb-2004

## Truckee R. 1966wy (median) - LWSA

#### **Rainbow Trout**

	[		East McCar	ran 967k	m		Lockwood	106.5 km			Clark	124.9 km			Painted	Rock 1316 k	m .		Dead Ox	171.7 km	n		Marble Blu	ff 187.0 km	0
	Total	Inst.	7-da	ay moving a	avg —	Inst	7-	day moving	avg	Inst.	7-	day moving	avg	16	nst. ——	-7-day moving	avg	Inst	7	-day moving	avg	Inst.	7	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	N	IAX MAX	( MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN "	MIN
Adult Migration	46	36	41	46	46	30	35	46	46	21	28	45	46	1 :	21 28	40	46	7	1	31	43	2	0	27	42
Spawning	32	22	27	32	16	18	21	32	28	12	14	31	32	1	12 14	26	32	4	1	17	29	1	0	13	28
Incubation	62	24	27	55	46	19	21	44	54	12	14	31	47	1	12 14	26	37	4	1	17	29	1	0	13	28
Rearing	183	182	183	183	163	183	183	183	183	181	183	183	183	1 1	80 183	183	183	161	162	183	183	139	141	183	183
Juvenile Maint.	365	364	365	360	341	365	365	365	365	363	365	365	365	3	62 365	365	365	343	344	365	365	321	323	365	365
Adult Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	1 3	62 365	365	365	343	344	365	365	321	323	365	365
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			East McCar	ran 967 k	m		Lockwood	106.5 km			Clark	124 9 km	1		Painted R	ock 131.6 k	m		Dead Qx	171.7 kr	n		Marble Blu	ff 1870 kr	n l
	Total	Inst	7-d	ay moving a	ivg	Inst		day moving	avg		7-		avg	Ins		-day moving				day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MA	X MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	150	07	00	07	62	PG.	O.F.	95	96	77	82	9.4	90	76	70	82	80	50	70	71	70	42	44	68	62
Spawning	91	73	76	85	57	70	75	87	85	62	66	77	88	6	64	76	87	46	55	67	77	28	23	63	80
Incubation	91	86	88	88	57	85	88	91	85	82	87	90	90	82	86	90	91	71	75	87	91	62	65	82	91
Larvae	62	57	58	62	55	56	58	62	62	53	57	60	62	52	56	60	62	41	45	57	62	32	35	52	62

#### Lahontan Cutthroat Trout

	- [	-	East McCar	⊤an 96.7k	rm		Lockwood	1 106.5 km			Clark	124.9 km	,	ΙГ	P	ainted Ro	ck 131.6 ki	m		Dead Ox	171 7 k	n		Marble Blut	f 187,0 kr	n
	Total	Inst	7-d	ay moving a	avg	Inst		day moving					avg	ΙГ	inst.		day moving	avg	inst		-day moving		Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MA	XAM_	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration Spawning Incubation Juvenile Maint Adult Maint,	136 91 91 107 365	57 40 40 102 356	63 44 44 107 356	94 76 76 107 327	96 75 75 101 302	57 29 29 103 365	59 30 30 107 365	97 70 70 107 364	103 82 82 107 352	44 23 23 94 365	50 23 23 99 365	73 58 58 107 355	90 75 75 107 342		42 22 22 94 364	48 23 23 97 364	64 54 54 107 352	84 69 69 107 339	37 10 10 70 346	32 12 12 71 349	41 29 29 107 347	70 61 61 107 332	35 6 6 47 325	34 0 0 50 329	40 23 23 107 346	67 60 60 107 324

## Mountain Whitefish

	Total		East McCan	ran 96.7 k	m -		Lackwood	106.5 km			Clark	124.9 km			P	ainted Ro	ck 131 6 kr	п		Dead Ox	171.7 km			Marble Blu	ff 187.0 kr	TI
Life Stage	# Days	Inst	7-da	ay moving a	wg	Inst.	7-4	day moving	avg	Inst.	7-	day moving	avg		Inst.	7-∢	day moving	avg	Inst	7-	day moving	avg	Inst	7	day moving	avg
_		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
					-									$\neg$								$\neg$				
Adult Migration	62	22	17	42	62	20	17	19	45	18	16	18	31		18	16	17	30	15	15	16	19	9	7	16	22
Spawning	47	29	31	46	47	24	17	45	46	31	27	39	45		31	28	38	45	30	24	34	44	28	22	33	44
Incubation	78	60	62	75	68	55	48	76	77	62	58	70	73		62	59	69	73	61	55	62	67	59	53	59	65
Incubation	74	64	68	53	28	65	70	74	74	71	73	74	67		71	74	74	66	71	74	71	63	71	73	71	58
Reaning	154	137	141	154	153	135	139	154	154	132	135	149	154		132	135	145	154	110	107	140	154	102	104	137	154
Juvenile Maint.	365	331	332	360	341	330	330	365	365	323	323	346	365		322	323	338	365	290	288	328	365	271	276	325	365
Adult Maint.	365	331	332	360	341	330	330	365	365	323	323	346	365		322	323	338	365	290	288	328	365	271	276	325	365

#### **Brown Trout**

	[		East McCan	ran 9671	km		Lockwood	106.5 km			Clark	124.9 km			Painted	Rock 131.6 k	m		Dead Ox	171 7 kn	n		Marble Blut	ff 187.0 k	m
	Total	Inst	7-di	ay moving	avg	Inst	7-	day moving	avg	Inst.	7-	day moving	avg	ln:		-7-day moving	avg	Inst	7-	day moving	avg	Inst	7-	day moving	g avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M/	X MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
													-				-								$\overline{}$
Adult Migration	62	22	17	42	62	20	17	19	45	18	16	18	31	1	16	17	30	15	15	16	19	9	7	16	22
Spawning	32	14	16	31	32	9	5	30	31	16	12	24	30	1	13	23	30	15	9	19	29	13	7	18	29
Incubation	78	60	62	75	68	55	48	76	77	62	58	70	73	6	? 59	69	73	61	55	62	67	59	53	59	65
Incubation	74	64	68	53	28	65	70	74	74	71	73	74	67	7	74	74	66	71	74	71	63	71	73	71	58
Rearing	154	153	154	154	153	154	154	154	154	153	154	154	154	15	3 154	154	154	147	147	154	154	131	135	154	154
Juvenile Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	36	2 365	365	365	343	344	365	365	321	323	365	365
Adult Maint.	365	364	365	360	341	365	365	365	365	363	365	365	365	36	2 365	365	365	343	344	365	365	321	323	365	365
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4,140

Degree Days (deg C)

ray 18-Feb-2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

4,416

3,969

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# Truckee R. 1992wy (extremely dry) - LWSA

#### Rainbow Trout

Ttall 15011			_																						
			East McCar	ran 967k	:m		Lockwoo	d 106.5 km	1		Clark	124.9 km	1		Painted Ro	ck 131.6 k	m		Dead Ox	171 7 km	1		Marble Blu	ff 187.0 kr	n
	Total	Inst	<b></b> 7-d	ay moving :	avg	inst	7	day moving	avg	Inst.	7⊣	lay moving	avg	inst.	7-	day moving	avg	Inst.	7-	day moving	avg	Inst.	7	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MA:	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX_	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
																									$\overline{}$
Adult Migration	46	3	0	12	33	1	0	1	19	a	a	2	11	D	0	2	11	1	٥	3	12	0	0	3	25
Spawning	32	2	0	6	19	0	0	0	11	0	0	0	4	0	0	٥	4	1	D	0	5	0	O	0	13
Incubation	62	2	0	11	42	0	0	0	11	0	0	0	9	0	0	0	9	1	D	0	11	0	0	0	28
Rearing	183	143	149	183	183	127	129	183	183	133	137	183	183	142	141	183	183	153	154	183	183	129	132	183	183
Juvenile Maint	365	325	331	365	352	309	311	365	365	315	319	365	365	324	323	365	365	334	336	365	365	306	314	365	365
Adult Maint	365	325	331	365	352	309	311	365	365	315	319	365	365	324	323	365	365	334	336	365	365	306	314	365	365

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F		East McCar	tan 96.7 k	(m		Lockwood	106.5 km			Clark	124 9 km	1		Painted Re	ock 1316 kr	n	1	Dead Ox	171.7 km	1		Marble Blu	ff 187.0 kr	m
Total	Inst.	7-d	ay moving a	avg	inst	7-	day moving	avg	Inst.	7	-day moving	avg	Inst.	7-	day moving	avg	Inst	7-	day moving	avg	Inst.	7	day moving	avg
# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
150	61	60	66	68	83	85	83	95	65	66	71	78	63	65	67	66	63	65	59	67	53	60	68	73
91	29	28	63	68	26	28	39	62	29	30	37	61	28	30	37	58	29	31	40	61	19	24	41	68
91	57	61	87	74	49	50	69	81	48	51	71	91	50	52	69	88	50	51	69	91	38	36	71	91
62	28	31	58	62	19	20	39	52	18	21	42	62	21	22	40	59	21	21	40	62	9	6	42	62
																	1							
	# Days 150 91	Total Inst. # Days MAX  150 61 91 29	Total Inst. — 7-d # Days MAX MAX 150 61 60 91 29 28	Total Inst. ——7-day moving MAX MEAN  150 61 60 66 91 29 28 63 91 57 61 87	# Days MAX MAX MEAN MIN 150 61 60 66 58 91 29 28 63 68 91 57 61 87 74	Total Inst. —7-day moving avg — Inst MAX MAX MEAN MIN MAX MX  150 61 60 66 58 83 91 29 28 63 68 26 91 57 61 87 74 49	Total Inst. —7-day moving avg — Inst —7- # Davs MAX MAX MEAN MIN MAX MAX 150 61 60 66 68 83 65 91 29 28 63 68 26 28 91 57 61 87 74 49 50	Total   Inst.	Total Inst. —7-day moving avg——	Total   Inst.	Total Inst. —7-day moving avg — Inst. —7-day	Total Inst. — 7-day moving avg — Inst. — 7-day m	Total Inst. —7-day moving avg — Inst. —7-day	Total Inst. —7-day moving avg — Inst. —7-day	Total Inst. —7-day moving avg — Inst. —7-day	Total Inst. 7-day moving avg Inst. 8-day movi								

#### Lahontan Cutthroat Trout

	1		East McCar	ran 96.7 k	m		Lockwood	106.5 km			Clark	124 9 km			Painted Ro	ck 131.6 k	m		Dead Ox	171,7 km	n –		Marble Bluf	ff 187 0 km	n ,
	Total	Inst	———7-d	ay moving a	avg	Inst.	7-	day moving	avg	inst	7-	day moving		Inst.		day moving		Inst	7-	day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
																									$\neg$
Adult Migration	136	52	59	66	85	43	42	70	73	47	53	71	74	46	51	72	67	50	53	65	67	37	35	68	72
Spawning	91	14	24	31	65	9	11	26	32	15	15	28	31	14	14	28	32	14	13	29	34	8	7	28	41
Incubation	91	14	24	31	65	9	11	26	32	15	15	28	31	14	14	28	32	14	13	29	34	8	7	28	41
Juvenile Maint	107	65	66	107	107	32	34	92	107	55	59	96	107	59	61	95	107	66	68	107	107	53	54	107	107
Adult Maint.	365	331	335	325	309	314	319	365	365	323	324	365	365	333	331	365	365	342	345	345	326	311	318	364	338

## Mountain Whitefish

	Total		East McCar	ran 96.7 k	m		Lockwood	106.5 km				Clark	124.9 km			P	ainted Ro	ck 131.6 ki	m .		Dead Ox	171.7 km	n		Marble Blu	#f 187.0 km	n
Life Stage	# Days	Inst	7-d	ay moving a	avg	Inst	7-	day moving		ŀΓ	inst.		day moving	avg	Г	Inst.		day moving		inst.		day moving	avg	inst	7	-day moving	avg
-		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	Ш	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MtN	MA	XAM >	MEAN	MIN
										П					Т												
Adult Migration	62	11	8	11	42	1	Ð	3	5		9	6	7	9		9	6	7	9	10	7	8	10	9	6	В	11
Spawning	47	30	27	35	39	2	0	1	13		25	19	25	29		26	22	27	30	30	28	35	35	25	21	31	36
Incubation	78	61	58	59	44	12	10	30	44		56	50	56	60		57	53	58	61	-61	59	66	60	56	52	62	64
Incubation	74	59	63	63	52	25	24	47	65		55	55	65	74		56	56	69	74	60	63	66	57	54	55	71	66
Rearing	154	102	102	150	154	90	92	115	152		94	95	123	152		96	98	123	149	94	98	127	152	80	78	132	154
Juvenile Maint	365	288	286	353	352	226	224	291	349		244	239	311	354		256	254	311	347	273	280	316	354	231	221	323	365
Adult Maint.	365	288	286	353	352	226	224	291	349		244	239	311	354		256	254	311	347	273	280	316	354	231	221	323	365
								_		L					L												

#### **Brown Trout**

Number of Annual Degree Days (deg C)

			East McCan	ran 96.7 k	m		Lockwood	106.5 km			Clark	124 9 km	1		P	ainted Ro	ock 131 6 ki	n		Dead Ox	171.7 km	n		Marble Blut	f_ 187.0 km	n
	Total	Inst.	7-da	ay moving a	avg	Inst		lay moving		ln:		day moving		ΙГ	Inst		day moving		inst		day moving		Inst.	7-	day moving	avg-
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M	X MAX	MEAN	MiN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN_	MIN	MAX	MAX	MEAN	MIN
											_															$\neg$
Adult Migration	62	11	8	11	42	1	0	3	5	5	6	7	9		9	6	7	9	10	7	В	10	9	6	8	11
Spawning	32	15	12	20	24	0	Ð	0	0	1	6	10	14		11	8	12	15	15	13	20	20	10	7	16	21
Incubation	78	61	58	59	44	12	10	30	44	5	50	56	60		57	53	58	61	61	59	66	60	56	52	62	64
Incubation	74	59	63	63	52	25	24	47	65	5	55	65	74		56	56	69	74	60	63	66	57	54	55	71	66
Rearing	154	128	141	154	154	120	123	154	154	12	2 130	154	154		129	134	154	154	137	143	154	154	114	125	154	154
Juvenile Maint	365	325	331	365	352	309	311	365	365	31	5 319	365	365		324	323	365	365	334	336	365	365	306	314	365	365
Adult Maint.	365	325	331	365	352	309	311	365	365	31	5 319	365	365		324	323	365	365	334	336	365	365	306	314	365	365
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rev 18-Feb-2004

Date of Truckee River Operating Model Analysis:

10-Feb-04

4,712

4,155

# Truckee R. 1986wy (extremely wet) - TROA

#### Rainbow Trout

1141110011																							_			$\overline{}$
	ſ		East McCan	ran 96.7 k	m		Lockwood	106.5 km			Clark	124.9 km			Pa	inted Ro	ck 131.6 kr	n		Dead Ox	171.7 kr	n		Marble Bluf	ff 187.0 kr	n
	Total	Inst	7-da	ay moving a	avqpve	Inst	7-	day moving	avg	Inst.	7-	day moving	avg	l l	nst -		day moving	avg	Inst.	7-	day moving	avg	Inst.	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	_ N	ΛAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	46	36	41	46	46	30	35	46	46	21	28	45	46		21	28	40	46	7	1	31	43	2	0	27	42
Spawning	32	22	27	32	16	18	21	32	28	12	14	31	32		12	14	26	32	4	1	17	29	1	0	13	28
Incubation	62	24	27	55	46	19	21	44	54	12	14	31	47		12	14	26	37	4	1	17	29	1	0	13	28
Rearing	183	182	183	183	183	183	183	183	183	181	183	183	183		180	183	183	183	161	162	183	183	139	141	183	183
Juvenile Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	:	362	365	365	365	343	344	365	365	321	323	365	365
Adult Maint.	365	364	365	360	341	365	365	365	365	363	365	365	365	;	362	365	365	365	343	344	365	365	321	323	365	365
71041114																										

#### Cui-ui

	Г		East McCar	ran 967k	cm		Lockwood	106 5 km			Clark	124 9 km			Painted Ro	ck 131.6 kr	m :		Dead Ox	171.7 km	17		Marble Blu	ff _187.0 kr	m
	Total	Inst	7-d	ay moving a		inst		day moving		Inst			avg	Inst.		day moving		Inst.			avg	inst.		day moving	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
											••				70		20		70		70	40			
Adult Migration	150	87	90	87	57	89	95	95	86	//	82	84	90	76	79	82	89	29	70	11	79	43	41	68	82
Spawning	91	73	76	65	57	70	75	87	85	62	66	77	88	61	64	76	87	46	55	67	77	29	23	63	80
incubation	91	66	88	88	57	85	88	91	85	82	87	90	90	82	86	90	91	71	75	87	91	62	65	82	91
Larvae	62	57	58	62	55	56	58	62	62	53	57	60	62	52	56	60	62	41	45	57	62	32	35	52	62
					- 1																_				

#### **Lahontan Cutthroat Trout**

	1		East McCan	ran 967k	em		Lockwood	106.5 km			Clark	124.9 km			Painted Ro	ck 131 6 k	m		Dead Ox	171 <u>.</u> 7 kr	n		Marble Bluf	ff 187.0 km	m
	Total	Inst	7-da	ay moving a	avg	Inst	7-	day moving	avg	Inst.	7-(	day moving	avg	Inst.		day moving	avg	Inst.			avg	Inst.	7-	day moving	avg
Life Stage	# Days		MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration Spawning Incubation Juvenile Maint.	136 91 91 107	58 40 40 102	63 46 46	94 76 76 107	96 74 74	59 32 32 103	60 31 31 107	97 70 70 107	102 82 82 107	44 24 24 94	50 23 23 100	73 58 58 107	90 <b>75</b> 75 107	42 22 22 24	48 23 23 97	65 54 54 107	84 69 69 107	37 11 11 71	35 12 12 71	42 29 29 107	70 61 61 107	35 6 6	34 0 0 50	41 23 23 107	67 60 60
Adult Maint.	365	356	356	327	301	365	365	364	352	365	365	355	342	364	364	352	339	346	349	347	332	324	328	344	324

#### Mountain Whitefish

Life Stage	Total # Days	Inst	East McCar	ran 96.7 ka		Inst		106.5 km		Inst.	Clark	124.9 km day moving	avg	l F			ck 131.6 kr lay moving		Inst	Dead Ox	171.7 kn day moving		Ins	Martile Blu	ff 187,0 ki	
Liio Diago	. 20,0	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	Щ	MAX	MAX	MEAN	MIN	MAX	MAX_	MEAN	MIN	MA	X MAX	MEAN	MIN
Adult Migration Spawning Incubation Incubation Rearing Juvenile Maint, Adult Maint	62 47 78 74 154 365 365	22 29 60 64 137 331 331	17 31 62 68 141 332 332	42 46 75 53 154 360 360	62 47 68 28 153 341 341	20 24 55 65 135 330 330	17 18 49 70 139 330 330	19 45 76 74 154 365 365	45 46 77 74 154 365 365	18 31 62 71 132 323 323	16 27 58 73 135 323 323	18 39 70 74 149 346 346	31 45 73 67 154 365 365		18 31 62 71 132 322 322	16 28 59 74 135 323 323	17 38 69 73 145 338 338	30 45 73 66 154 365 365	15 31 62 71 110 290 290	15 24 55 74 107 288 288	16 34 62 71 140 328 328	20 44 67 63 154 365 365	9 24 55 7 10 27 27	276	16 33 59 70 137 325 325	22 44 65 58 154 365 365

#### **Brown Trout**

	I		East McCar	man 96,7 k	cm :		Lockwood	106 5 km			Clark	124.9 km		P	ainted Ro	ck_131 6 k	n ·		Dead Ox	<u>17</u> 1 7 kn	n		Marble Blut	ff 1870 kr	n
	Total	Inst.	7-d	ay moving a	avg	inst	7-	day moving	avg	Inst	7-	day moving	avg	Inst	7-0	lay moving	avg	Inst.	7-	day moving	avg	Inst	7-	day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						T											. [			- 12			_		
Adult Migration	62	22	17	42	62	20	17	19	45	18	16	18	31	18	76	17	30	) 15	15	16	20	9	7	16	22
Spawning	32	14	16	31	32	9	5	30	31	16	12	24	30	16	†3	23	30	16	9	19	29	13	7	18	29
Incubation	78	60	62	75	68	55	49	76	77	62	58	70	73	62	59	69	73	62	55	62	67	59	53	59	65
Incubation	74	64	68	53	28	65	70	74	74	71	73	74	67	71	74	73	66	71	74	71	63	71	73	70	58
Rearing	154	153	154	154	153	154	154	154	154	153	154	154	154	153	154	154	154	147	147	154	154	131	135	154	154
Juvenile Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365
Adult Maint	365	364	365	360	341	365	365	365	365	363	365	365	365	362	365	365	365	343	344	365	365	321	323	365	365

Degree Days (deg C)

3,963

Date of Truckee River Operating Model Analysis:

10-Feb-04

4,413

33

# Truckee R. 1966wy (median) - TROA

#### **Rainbow Trout**

I (dillibuti	Hous													_												
			East McCar	mran 96.7k	m		Lockwood	106 5 km			Clark	124,9 km	`	1 E	P	ainted Ro	ck 1316 ki	m		Dead Ox	171.7 km	ກ		Marbin	e Bluff 187.0	km
	Total	Inst.	7-d	lay moving a	avg	Inst	7-	day moving	avg	Inst.	7-	day moving	avg		Inst.	7-∢	day moving	avg	Inst	7-	day moving	avg	n	st. —	7-day mov	ng avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M	X M	MEAN MEAN	
														ΙТ												
Adult Migration	46	25	28	44	46	16	20	42	46	9	0	31	44		8	0	29	44	0	D .	13	34	1	, ,	0 3	34
Spawning	32	13	14	30	21	8	10	28	32	5	0	17	30	П	5	0	15	30	0	D	7	20	1	, ,	0 1	20
Incubation	62	13	14	32	48	8	10	28	45	5	0	17	30	ш	5	0	15	30	0	Q.	7	20	1	, ,	0 1	20
Rearing	183	182	183	183	182	183	1B3	183	183	179	163	183	183	ш	177	183	183	183	157	161	183	183	12	.5 1	28 183	183
Juvenile Maint.	365	364	365	360	341	365	365	365	365	361	365	365	365	ш	359	365	365	365	339	343	365	365	30	7 3	10 365	365
Adult Maint.	365	364	365	360	341	365	365	365	365	361	365	365	365	ш	359	365	365	365	339	343	365	365	34	7 3	10 365	365
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			East McCan	ran 967k	m		Lockwood 106 5 km				Clark	124 9 km		Painted Rock 131.6 km					Dead Ox 171.7 km					Marble Bluff 187.0 km			
	Total	inst. ——7-day moving avg					Inst, ——7-day moving avg——				inst7-day moving avg					7-<	ay moving a		Inst. ——7-day moving avg					Inst. ——7-day moving avg			
Life Stage	# Days		MAX	MEAN	MIN	MA	X MAX	MEAN	MIN	MAX	MAX	MEAN	MiN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	M	AX MAX	MEAN	MIN	
						Т																					
Adult Migration	150	79	85	78	63	83	86	87	81	66	74	81	- 48		65	72	77	78	40	42	64	76	:	6 38	61	73	
Spawning	91	64	70	76	63	6	64	74	79	49	56	72	77		49	55	68	75	27	26	59	73	:	2 21	56	70	
Incubation	91	77	79	88	63	71	78	91	85	73	74	84	91		73	74	82	91	62	64	80	89		3 58	78	91	
Larvae	62	48	49	62	59	4	48	62	62	43	44	54	62		43	44	52	62	32	34	50	60	1 2	3 28	48	62	
																	_										

## **Lahontan Cutthroat Trout**

			East McCar	ran 967k	m		Lockwood	106.5 km			Clark	124.9 km	1	Γ	- P	ainted Roo	≭ 131.6 kr	n		Dead Ox	171.7 km	n	Marble Bluff 187.0 km			
	Total	Inst. ———7-day moving avg					Inst. ——7-day moving avg			Inst7-day moving avg				Inst7-day moving avg				Inst.	7-	day moving	avg	Inst7-day moving avg			avg	
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
						T																				$\overline{}$
Adult Migration	136	48	49	84	85	51	54	82	98	43	49	55	80		41	47	52	70	34	34	40	53	36	36	39	54
Spawning	91	26	24	70	67	19	19	58	73	16	19	35	60		16	19	28	58	10	11	22	45	5	O.	22	45
Incubation	91	26	24	70	67	19	19	58	73	16	19	35	60		16	19	28	58	10	11	22	45	5	0	22	45
Juvenile Maint	107	100	107	107	101	100	107	107	107	85	90	107	107		81	88	107	107	67	66	107	107	43	39	107	107
Adult Maint	365	356	356	325	292	365	365	365	357	362	365	360	346		362	365	356	345	345	351	350	331	319	320	347	320
						1																				

#### Mountain Whitefish

	Total		East McCarr	ran 96.7 k	m		Lockwood	106.5 km			Clark	124.9 km		P	ainted Ro	ck 1316 k	m		Dead Ox	171.7 km	n	Marble Bluff 187.0 km				
Life Stage	# Days	Inst. ——7-day moving avg			vg					Inst. ——7-day moving avg			Inst7-day moving avg			knst7-day moving avg				Inst.		day moving	avg			
		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN.	MIN	
																		_							$\overline{}$	
Adult Migration	62	28	23	39	62	25	19	28	45	23	18	26	34	23	18	26	32	20	17	20	26	16	16	18	26	
Spawning	47	33	31	45	42	26	26	46	47	33	29	45	47	33	31	45	46	32	27	44	45	29	22	39	45	
Incubation	78	64	62	75	61	57	57	77	78	64	60	76	78	64	62	76	77	63	58	73	69	60	53	66	65	
Incubation	74	63	66	54	30	64	69	71	74	70	72	74	68	71	72	74	67	71	74	72	64	71	73	71	59	
Rearing	154	130	133	154	154	128	131	154	154	114	117	146	154	113	116	141	154	104	102	132	154	94	93	130	154	
Juvenile Maint,	365	324	324	360	341	322	321	365	365	303	304	338	365	302	303	332	365	283	282	320	362	263	264	317	365	
Adult Maint	365	324	324	360	341	322	321	365	365	303	304	338	365	302	303	332	365	283	282	320	362	263	264	317	365	

#### **Brown Trout**

	[		East McCar	man 96.7 k	m		Lockwood	1065 km			Clark	124 9 km	١		Р	arnted Ro	ck 1316 k	m		Dead Ox	171.7 km	n		Marble Blut	f 1870 kr	n	
	Total	Inst. ———7-day moving avg———			Inst.	st. ——7-day moving avg			Inst.	Inst. ——7-day moving avg———				Inst. ——7-day moving avg			Inst	7-day moving avg			inst.	inst. ——7-day moving av		avg			
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	
														Т													
Adult Migration	62	28	23	39	62	25	19	28	45	23	18	26	34		23	18	26	32	20	17	20	26	16	16	18	26	
Spawning	32	18	16	32	32	11	11	31	32	18	14	30	32		18	16	30	31	17	12	29	30	14	7	24	30	
Incubation	78	64	62	75	61	57	57	77	78	64	60	76	78		64	62	76	77	63	58	73	69	60	53	66	65	
Incubation	74	63	66	54	30	64	69	71	74	70	72	74	68		71	72	74	67	71	74	72	64	71	73	71	59	
Rearing	154	153	154	154	154	154	154	154	154	153	154	154	154		152	154	154	154	143	146	154	154	11B	123	154	154	
Juvenile Maint.	365	364	365	360	341	365	365	365	365	361	365	365	365		359	365	365	365	339	343	365	365	307	310	365	365	
Adult Maint.	365	364	365	360	341	365	365	365	365	361	365	365	365		359	365	365	365	339	343	365	365	307	310	365	365	
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Date of Truckee River Operating Model Analysis:

10-Feb-04

4,455

Number of Annual Degree Days (deg C)

34

### Truckee R. 1992wy (extremely dry) - TROA

### Rainbow Trout

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			East McCar	ran 967k	.FFT		Lockwood	1065 km	1		Clark	124.9 km			P	ainted Roc	ж 1316 kr	n		Dead Ox	171 7 km	ו		Marble Bluf	1 1870 ka	n
	Total	Inst.	7-₫	ay moving a	avg	inst	7-		avg	inst.	7-	day moving						avg	inst.	7-	day moving		tnst,		day moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	1	XAN	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
Adult Migration	46	3	0	12	33	1	0	1	19	0	0	2	11		0	0	2	11	1	٥	3	13	0	٥	3	24
Spawning	32	2	0	6	19	0	0	0	11	0	O	0	4		0	0	0	4	1	0	0	6	0	0	0	12
Incubation	62	2	0	11	40	D D	0	O	14	0	0	0	9		0	a	0	8	1	0	0	12	0	0	0	24
Rearing	183	156	163	163	183	147	154	183	183	141	141	183	183		147	153	183	183	153	156	183	183	130	133	183	183
Juvenile Maint.	365	338	345	365	351	329	336	365	365	323	323	365	365	11	329	335	365	365	334	338	365	365	307	315	365	365
Adult Maint	365	338	345	365	351	329	336	365	365	323	323	365	365	ш.	329	335	365	365	334	338	365	365	307	315	365	365
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			East McCar	ran 96.7 k	m		Lockwood	106.5 km			Clark	124.9 km			Painted Re	ock 1316 kr	n		Dead Ox	171.7 km	n		Marble Blu	ff 187.0 ki	m '
	Total	Inst	7-da	ay moving a	avg	Inst.	7-	day moving		Inst	7-	day moving	avg	Inst.	7	day moving	avg	Inst	7-	day moving	avg	inst.	7-	day moving	avg——
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MiN
Adult Migration	150	61	60	66	66	85	87	87	98	65	66	71	78	63	65	68	69	63	65	59	67	53	60	69	74
Spawning	91	29	28	63	66	26	28	40	64	29	30	37	61	28	30	37	59	29	31	40	61	19	24	42	69
Incubation	91	59	62	86	74	51	54	71	87	49	51	71	91	51	52	69	87	50	51	69	91	39	36	71	91
Larvae	62	30	32	57	62	22	24	42	58	20	21	42	62	22	22	40	58	21	21	40	62	9	6	42	62
	.																								

### **Lahontan Cutthroat Trout**

			East McCan	ran 96.7 k	um .		Lockwood	106.5 km			Clark	124.9 km	1		Р	ainted Ro	ck 131.6 k	m		Dead Ox	171 7 kr	n		Marble Blut	f 187.0 k	m
	Total	Inst.	7-da	ay moving a	avg	Inst		day moving	avg	Inst		day moving					fay moving		Ins		day moving		Inst.			avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MiN		MAX	MAX	MEAN	MIN	MA	( MAX	MEAN	MIN	MAX	MAX	MEAN:	MIN
										Τ΄				Т												
Adult Migration	136	52	59	68	85	43	42	70	73	47	53	71	74	- 1	46	51	72	68	50	54	65	68	37	35	67	71
Spawning	91	16	24	32	65	10	10	27	32	15	16	28	31		14	14	28	32	14	13	29	34	8	7	28	40
Incubation	91	16	24	32	65	10	10	27	32	15	16	28	31		14	14	28	32	14	13	29	34	8	7	28	40
Juvenile Maint.	107	72	76	107	107	68	68	107	107	60	61	98	107		64	65	97	107	66	68	106	107	53	55	105	107
Adult Maint.	365	340	346	325	309	341	349	365	365	329	336	365	365		338	343	365	365	34	347	345	324	314	318	364	339

### Mountain Whitefish

	Total		East McCar	ran 96.7 k	m		Lockwood	106 5 km			Clark	124.9 km			P	ainted Ro	ock 131.6 k	m		Dead Ox	171.7 km			Marble Blu	ff 187.0 kr	n
Life Stage	# Days	Inst	7-da	ay moving a	avg	inst.	7-	day moving	avg -	inst	7	day moving	avg	1 1	inst.	7-	day moving	avg	Inst.	7-∢	day moving	avg	Inst.	7-	day moving	avg
•	,	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MA)	( MAX	MEAN	MIN	Ш	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														П												
Adult Migration	62	10	8	10	16	7	4	6	7	9	6	7	9	ш	10	6	7	9	10	7	8	9	9	6	8	10
Spawning	47	30	26	36	38	2	0	1	8	26	20	26	29	ш	28	23	27	31	30	27	34	35	27	22	31	36
Incubation	78	61	57	60	43	13	9	32	39	57	51	57	60	ш	59	54	58	62	61	58	65	60	58	53	62	64
Incubation	74	59	63	63	52	23	24	47	64	55	55	65	74	ш	56	56	68	74	60	63	66	57	54	55	71	66
Rearing	154	104	105	151	154	98	99	128	154	95	97	124	152	H	97	97	124	149	96	97	128	152	81	79	130	154
Juvenile Maint.	365	289	290	349	351	253	245	317	360	251	248	312	351	ı	263	264	312	347	277	276	317	354	232	224	319	363
Adult Maint.	365	289	290	349	351	253	245	317	360	251	248	312	351		263	264	312	347	277	276	317	354	232	224	319	363
														J L												

### **Brown Trout**

	[		East McCar	man 96.7 k	TRI		Lockwood	106.5 km			Clark	124.9 km			Р	ainted Ro	ock 131.6 ki	П		Dead Ox	171.7 kn	n		Martile Bluf	187 0 km	n
	Total	Inst.	7-d	ay moving a	svg	Inst	7-	day moving	avg	Inst.	7-	day moving		Г	Inst.		day moving		inst		day moving		Inst.	7≺	lay moving	avg
Life Stage	# Days	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN		MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN	MAX	MAX	MEAN	MIN
														Т								,				$\overline{}$
Adult Migration	62	10	8	10	16	7	4	6	7	9	6	7	9		10	6	7	9	10	7	8	9	9	6	8	10
Spawning	32	15	11	21	23	0	o	1	6	11	7	11	14		13	9	12	16	15	12	19	20	12	8	16	21
Incubation	78	61	57	60	43	13	9	32	39	57	51	57	60		59	54	58	62	61	58	65	60	58	53	62	64
Incubation	74	59	63	63	52	23	24	47	64	55	55	65	74		56	56	68	74	60	63	66	57	54	55	71	66
Rearing	154	138	150	154	154	132	143	154	154	128	134	154	154		134	143	154	154	137	144	154	154	115	126	154	154
Juvenile Maint	365	336	345	365	351	329	336	365	365	323	323	365	365		329	335	365	365	334	338	365	365	307	315	365	365
Adult Maint.	365	338	345	365	351	329	336	365	365	323	323	365	365		329	335	365	365	334	338	365	365	307	315	365	365
																										_

Number of Annual 4,208 5,485 5,060 4,925 4,553 4,748
Degree Days (deg C)

35

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# **Attachment to Water Quality Appendix**

# **Beneficial Uses of Surface Waters**

Beneficial uses of surface waters of the Lahontan Region are listed at: <a href="http://www.swrcb.ca.gov/rwqcb6/BasinPlan/Index.htm">http://www.swrcb.ca.gov/rwqcb6/BasinPlan/Index.htm</a> and are attached.

A summary of beneficial uses for water bodies identified in the Nevada Administrative Code are listed at: <a href="http://ndep.nv.gov/bwqp/file/use">http://ndep.nv.gov/bwqp/file/use</a>s and are attached.

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	WEDDOLOGIC INVENTOR						BENE	FICI	AL	USI	ES					
	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	H.			Ţ	 	7 *	5 5	a	. 9	<b>.</b>	1 5		T	RECEIVING WATER
HU No.	COMMEAD LAKE HYDROLOGIC UNIT					Ιį	POW MC-1	9 8	313	8	H	li i		á		
l	OWNERD LAKE WYTEAMPS		X		x	Τ		X					Ι		ХX	
	COMMEND SYCPOR	DEASONAL LAKE/EMERGENT MEADOW FRESHWATER SLOVEN EMERGENT MOW	X :		X	Ţ		XX			×		1			INTERNALLY DRAINED LAKE
	KHITH TWIN LAKE	SFASONAL LAKE PLAYA	X S		X .	╄	l ×	XX	<del> X</del>	X	X X X	- 1'	Ή	×	× ×	COMBERT LAKE INTERNACIA DHAINED CAKES
l	SOUTH TWIN LAKE	SPESONEL CARRYPLAYS	X.		X	1		хх	X	x				П		INCERNACITY DRAINED LAKES
l	TWELVE MILE CREEK SPRINGS, SLEED/MEMBREMS WESTLANDS	PERSONNIAL STREAM JERINGS/SEEPS/EMERGENT MEADOWS	X		X X	+	X		+	X	X	Н,		x	×х	CONTROL & NEVASAL
	MINOR SURFACE WATESS		X 2		X 2	4	X	X	$\perp$	x			(	x	$\top$	
l	M* GOR NETLATIN	"PRING" GEERS EMERGENT MARSHES	X 3	<u> </u>	X 2	K	_ X	x x	x	х	X	L]	κŢ	X.	x j x	COMIEAD LAKE/GW
641.00	SURPRISE VALLEY HYDROLOGIC UNIT	FI 1 I I 3 I I 3 I	Ιi		i		:	i			- 1	i	:	1		<u> </u>
641.10	BARE CREEK HYDROLOGIC AREA		. 1							_						
	AAKS CRESP	PERENTIAL STREAM	X Z	ĸ	X >			x x	T	x	Ŧ			х		LOWER ALKALI LAKE
	MINOF SURFACE WATERS	SAUTHE TWEE	X 1	,—	x x x	F		X X	Ļ	x	XX			X	Ŧ	ONTERNALLY INACHED LAKE LOWER ALKALI LAKE
	SPHINGS, REEDS REMEMBERT WETLANDS	COLD & NOT SPRINGS, EMERGENT MEA	x 2	K I	X X	4	] [x	X	Ť	x	╅				хx	LOWER ALKALT LAKE
	eacte caked emono niorza	PERFENTAL STREAM SERFINIAL STREAM	X 2		X X			X X	+	X	X			X	$\perp$	LONER A RALL LAKE
	CHOMPS OF CREEK	PERENDIAL STREAM	X 2		x ·	╫		XX	╅	ž	X			x	╫	DOWER ALKALI LARS BARE CREEK
	SMAKE LAKE	SEASONAL LAKE EMERGENT MEADOW	X		X >		X		$\top$	X	×	П				HANE CKEEK
	SWINTED SEEDS EMESCENT WETLASTS SWINTER SESSENATE	NEW YORK REPRAZEMPNOGRYC MEACORS RESERVOIR	X		X 2		X	XX	╫	X	x			X		STLATE CREEK
	SPRINGS SHEETS SPERGENT MATLANIX	SPRINGS DEEPS/EMERGENT PURDOWS	X X		x	T	l  ×[	x]	$\downarrow$	X	×					PROPER UNITER
	MINOR STREACH WATERS MINOR WETLAKES	UJH INGS / SEEDS - EVERGENT / MARSHES	X X		X X			X X	+	X	X	1;		X	x x	LOWCE ACKALL LAKE - FA GM
													_			
	CEDARVILLE HYDROLOGIC AREA BXSSS RI SEPSOI-	RESERVOIR	X X	( T	X >	7	ΙXΙ	X	7	х	T x	X >	۴	XI.	ХX	SAND CREEK
	ADM'S CAREA	PURENFIAL STREAM	X 3	ĸ	X 3	ī	×	хх	土	x	x		$\perp$	x		MIDDLE ALEAS: DAKE
	CMT_CREFT  **MT_CREFT WETLANDC	PERENNLAL STREAM	X 3		X X		X	XX	+-	X	X	+	+-	X	хx	MIDDIL ALKAL: LAFD
	PALDER CREIK	NAZSTZ SATMINE	X X	ĸ	X X	1	x	хx	$\pm$	x	x			x		MIDDLE ALEAS: LAKE
	ART PERS MIDDLE ALKALI SARS	SERSONAL STREAM "ALING LAKE	×,	4-	X >	+	X	X X	+	X		X 3		X	Ŧ	MIDDLE ALEAST LAKE INTERNALLY DRAINED SAKE
	MIDPIG ALKALI LAKE EMENGENT SHOWELINE WHILAM IN	MINA'I FLAT EMPROENT SHORESCHE	x x			İ	x		土			x 2				MIDDLE YERS CLARE
	CEDARVILLE EYDROLOGIC AREA (pontipued) M.DOLB ALVALL (. SPRINGS, EMPRODES METLANDS	SURTINGS/INTERCENT MEADOWS	x ,	П	X X	F	×	ŢП	Ţ	х	Ţ	x s	Ť	Ų.	<u>,</u>	MIDDLE ALXALI LAKI.
	WIDDLE ASSAULT: SPHINGS DMFRONT WELLSHOOD WHERPIT VALLEY MINDRES WELLSTED GURCHOS	COLD = HD2 SPETBUS EMERGENT MOW	ХX	7	ХX	7	ХX	х	×	х	х	X >	7	X :	₹T	MIDDLE ALEADT SAKE
	LECHARDS HOT SPRINGS	HOY SPRINGS OF SERGENT MERCONS	X X	1	X X		ХX		Ţχ	x		X X		X :	¥	MIDDLE XIXALI LAFF
	MINOP BURSACE WATERS MINOR WETLAKEZ	JORINGS JOES & EMERCENT NARSHES	x ;		<del>         </del>			XX		<del>\$</del>		Ŷ,			××	M*DD(F ALZALI ÇAKE Z MA GA
	FORT BIDWELL HYDROLOGIC AREA RIG MUD LAKE	SERSOKRI LAKE PLAYA	X X		X		Ι×	X I	ĪΧ	X	XX		* * .	100		INTERNALLY DRAINED LAKE
	DISMAG CRAEK	PERKKKIAL STREAM	X >		х	ļ	X	x x		х	X			Х		TEEP TREAT TORRISON)
	PISMA SWAMS WETSAKTS  ADMINUS SEEPS EMEMGENS WETSANDS	PLOCOPLAIN, EXEMPENT MEADOW SPRINGS EXEMPENT MEADOWS	XX		X	╁	×		╫	X	X					TEFF (TAPEX (ORTICON) TEFF (TAPEX (ORTICON)
	CAME LAKE	SEASONAL LAKE FEMENOFMY MEADAW	X 3	4	x	İ	Ι×	X	1	×	×				x x	UPPER ALKASS LAKE
	RYDWELL CREEK	PERSONIA: STREAM PERSONIA: STREAM	X 3	-	X X			x x	+	x	X			X		UPPER ALKALI LAKE UPPER ALKALI LAKE
	AGRACI CARC WETCHNOS	WETT.ANDS	x >		x	Ϊ	X	X	士	X	ХX	7	Ī		XΧ	
	PPER ALBAL: LAKE SPRINGS SERPSERGERY WPTLANES	COLD & HOT BUHCHGG/EMERGENT MOWN	x 7	Н	хх	Ţ	X	XX	7	x	XX			X		INTERNALLY DRAINITY LONG USPER ALMALI NAME
	MLD "YEE DESTRUCTION OF LEAST OF STATE	CHASONAL LAKE/EMESCENT MEADOW	X X	Ħ	X 3	7	T	X	+	×	X		Ť			INTERNALLY LOADNED LAND
	M NOR SURPACE WATERS	JAKEN MANAGER PARENGENT MARGUES	X X		X X			X X	T	X	X			X	Ţ	OBGEN BEKART DAKE HE OM
l '	M NOR WET ARES	SARIN, AV SEA NA SEMICIONELL ANDICORES.	A   2	<u> </u>	1414	-	*	^ ^		^;	1.		٠	^ .	<u> </u>	OFFER ALBADI DARK IIP IW
	DUCK FLAT SYDROLOGIC UNIT								Ų		Į	-		4		1 + 1 1 1 1 1 1
	MINDER SUNFACE WATERS	SERINGS, JEEPS PMERGENT, MARKHET	x s	7	+ <del>2</del> 2	+	X	÷	┿	x	+÷	H	+	H,	хx	DICE FLAT OW
639.00	SHOWE CREEK HYDROLOGIC UNIT	PERENNIAL STREAM	X X	Τİ	х	Т	ĪΣ	хx	7	x	] x	1	١.	x		SMORE CREEK RESERVOIP
	MORA CHEST REFERMO R	REMARKOUR	ΧX	T I	хх	T	X	x x	Т	×	X		$\perp$	$\Box$	$\vdash$	SMOKE CREEK GROWNSWATER SMOKE CREEK GROWNSWATER
	WIGH CHECK MINGE NURFACE WATERS	PERRINIAL STREAM	X 2		XX	+		X X		X	X		┰	╁	╫	SMOKE CREEK GROUNDWATER
	MINOP WETTAKES	SPPINGS/SEEPS/EMERGENT/MAKSHES	X 3		χŻ		X	хх	X		х	1		X :	ХX	SMORE REEK OR AINDMATER
638.00	MADELINE PLAINS SYDROLOGIC UNIT		l j		1		: 1					i	:	i	:	
	JAASSHOSPER VALLEY WETLANDS	WFT MFACOW/EMERGENT/SPRINGS				T			T			П	Ħ	1		WO YELLAN REPROBEED AND
	HADELINE PLAINS NU (continued)	FINEMERAL POND	X 7	₩	×	╁	<del>    ^  </del>	××	╫	х	×	H	Н	H	+	AFD ROCK . REFF
	KED NOF LAKE	SEASONAL CARS/FMERGENT NEADOW	X )		x	1	Ι×		7	x	X					RQD NO K LMEEK
	SPRINGS/GREEN METLANDS  KIND ROOK CREEN WETLANDS	METCLANDS	XX		XXX	+	X		╫	x	X	Н	+		X X	RED ROCK CREEK
	CODGE MESSHADIA	NESE-VOI-	X 2	47	x	I	×	X X	#	x	X		$\blacksquare$		$\Box$	NED BOTH CHERK
	STREET SERVICES FOR SERVICES FO	HEIGENVIA PERSINIA', STRFAM	X X		X	+		X X	+	X	×		╫	H		MED KOCK CAFER MED KOCK CAFER
	TALL RESESSORTS	APSS/AOCTX	x y	rl I	×	士	X	хx	×	х	x	廿	$^{\pm}$	ɒ		MADELINE PLATES OW
	COUNTRALING CAREEV SERVICES STEED TENESCENT NOTLANDS	SEMEMBRAL STREAM SERINGS/SREES MEMBROSENT	XX		X	Ŧ		x x	+	x	X	H	+	H		MADELINE PLAINS ON MADELINE PLAINS ON
	VALO GERTMOS MIN : WEYLANDS	WET MERICOW	X X	<b>T</b>	x	$\pm$	X	ХX	土	х	×		T	Ë	ХX	
	COLD SPRINGS MIN 5 MEAKEW LES MAINS, NE T METIMODS	RESERVO, OR FINENCENT SPASORAL SPRING TEMPROENT	XX		X	F	×		Ŧ	X	X	H	F		XX	MADELINE PLATES OW
	MANS, MP " WPTLANDS COLT OPERAGE MIN 3 RES.	RUSEIAC : H EMERGENI	X X	r	×		T x	x		х	X	Н	$\perp$		X X	BOX 51% (No.
	COLD SPRINGS HTM + TVA HE.	SEASONAL SESERVO R FMERGENS	X X		x	F	X		Ŧ	X	X		F			HOLESPACES
	COLD STRENGE MIN 4 HES COLD STRENGS MIN 2 HES	MEANONAL MESKAUCTRYFMRRGFNT KYSPRYGIPYEMRRGFNT	X		X	+	- 2		+	x	X	H	H		×	TRY CREEK (CHLD NESS (TNF) DRY CREEK
	JID SPRINGS MTK 1 HES.	RESERVO: PARKERSENT	χJ	ĸ	x	Ţ	x	x	+	х	X		F	Ë	хX	DRY CHREK
	COLD PERINGS MIN 2 PINTO PAS COLD SERIORS MIN 5 RES	BEANGMAL NEWKYVOLK FMERGENT SEASONAL SPRING RESERVOLK EMEKSEML	X 3		X	+	- X		+	x	X		+			BOX SPS "NEW DRY CYZEK
	COLD STRINGS MIN. 6A RRS	RESERVO, RYSMERGEPT	X X	C	x	Ŧ	×	x	丰	x	х		Г	Ë	ХX	DRY CROEK
	THIL MEMINES MTN 4 DOWN RES COLD SERINGS MTN 5 SUBJECT	SEARONAL RESERVOIR (EMERGENT) SPRING EMERGENT	X 3		x	+	×		+	x	X		+			BIG MEADOWS RESERVED.
	COLD STRINGS MITS 1 LICAMY RES.	DEASONAL KENTKYDER/EMERGENE	X >	ď	x	1	1_1×1	х	$\bot$	X	×	口	T		ΧX	RI MEARXW: RESERVOIR
	COLD SERVICES MTN 4A MET ANDS COLD SERVICES MTN 4 RES.	SPHING/FMFROENT MEADOW SEASONAL RESERVOIR/ENCKSENT	X X		X	+	X		+	x	X	+	+			DRY CREEK
	COLD SERINGS MTN 3 BRAIDED WITTANIA	RIPARIAN/EMENGENT MEADAM	X Z	ĸ T	x	t	]×[	х	1.	x	×		Ħ	1	хx	DRY CRRFF
	COLLE STRINGS MIT 2 NAME TAG NES COLLE STRINGS MITE NO BES	RESERVO PARENGENT NEANCHAL RESERVO: RAEMERSENT	X X		X	+	X		+	x	X		╀			DRA CNESK
	COLD SPINS MIN ST MES	MRAGONAL RESERVOIR EMERGEMI	X 2		x	1	×		1	Ž,	X		T			DRA CRESE
- '														• • •		

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY					В	ENI	SF 1	cr	AL	USI	s					RECEIVING
L.	DRAINAGE FEATURE	CLASS MODIFIER	E 6	وا	8 6	1 1 1	<u>.</u>	1-2	r3	¥ C	į	dio		2 2	Đ.	¥ .	,	WATER
HU No.	COLL SPRINGS MON 626 MES.	SEASONAL, RESIESVOI P / EMERCENT	XX		1 5 2		313	닉	X	ŭ,	48	ŭ,	X	2 2	Н	8	Ų.	DRY CRESK
	COST SPRINGS MEN 040 AND	"EASONAL REPERVOTE/EMERGENT	хх		7	ï		×	х			X	1×	$\pm$	Ħ	7	x	DRY CRESS
	COLD SPRINGS YON 041 RES. COLD SPRINGS YON 045 RES.		XX		3		H		X	Н		X	₩	+	H			DRY CREAK DRY CREEK
	COLD SPRINGS YOU OUR RED.	SEASONAL RESERVOIR/EMERGENT	χİχ	1	×			x	x			x	x	1				COLD PLANINGS CASA.
	CLD SPRINGS STV 009 SES. COLD SPRINGS STV 029 NPS		XX	_	- 3		$\Box$		X	7	-	X.	X	Ŧ	П			DRY CRECK
63B.00	HADELINI PLAINS HU (continued)	PROCESSE REPOSECTATEMENTER.	XX	╫	+	Ή	Н	Ť	Ĥ	+	+	1	╫	+	Н	ť	1	IN CASTR
	COLD SPRINGS MIN 200 RES	SEAGONAL RESERVOIR EMERGENT	ХX		2		$\Box$		х		$\Box$	х	X	#	Ħ			TRY CROSS
	MAYEMBALE 1 NES. AAVEMBALE SPAULDING NES.	NEPERVOTA/EMENGENT NEA-YORAU RESERVOTA/EMENGENT	XX		X		Н		X	+	+	X	X	┿	Н			MADELINE PLATES ON FOLD SPHINGS CHELK
	MAYENIALS MAYR KSS.	NEAS WAS RESERVOIR BASHGEM	хх				世	x	х	$\pm$	İ	x	x	土	П	1	x	SOLD ABAIRLY CARRY
	X DE RESERVO (H. Y. L.P. SER TAM SAUTINDALE SEOPTEDAL SES		XX		) )		4		X			X	X	+	Н			COLD SPRINGS CREEK COLD SPRINGS CREEK
	RAVENDA'F LUNKI SPR. 1 RES		x x		- x		+		x			<del>\$</del>	╁	╈	Н			MADELINE PLAINS ON
	RAVENDALI LONG SPR. 2 RES.		X X		X		$\Box$		X	Ι.		х	×	I	П	_		MADELINE PLAINS ON
	RAVENTALE PURKEY RES COLD SPRINGS MIN DRY JOH 2 MES		XX	-			₩		X	+		X	X	+	₩			MADELINE PLAINS ON 210 MEADOWS ARS
	COLD SERVINGS MITN DRY CON 3 N-S.	STANCHAL RESERVO: N/EMFRGENT	хх		Ĭ,			X	x	$\perp$		х	X	1	ш	7	X	BIG MEADOWN PRO
	CO'D SPRINGS MIN PRY COW 1 RES. MADELINE TOO PES.		XX		3		4		X	T	Г	X	X	T	П			ACC MEADOWS 393
	YENDIBOURE FEDERAGIS HET.		x x		+		X.		ź	x		<del>\$</del>	뉲	+	H			VAN LAAN CREEK VAN LAAN CREEK
	VACELINE 060 KEY.		ХX						Ξ	_		x	Ī		П			MEN, DECYME RESERVOOR
	CHANGERS RIDGE FOR SER SPR. CHANGERS RIDGE TWO RES.		X X		3		+		X	+	Н	X	X	+	Н			MENDIROURE RESERVO K
	JUNE OF REDGE OF RES.	NSANCHAL XEST-KUDIR/AMPROEM	X X	ī	7		_	x	X	$\pm$		X	[x]	$\pm$	Н			MADELINE BIACKS ON
	JAMEFER REDGE J69 KSA.	RESERVOIR EMERGENT SPRING RESERVOIR/FMERGENT	XX		x	Ī	1		X	1	П	X	X	T	П			MADELINE PLATES ON
	AUNCERS BICKE 169 PR HETOPAS SPR MIT DONALD MOAK OEF RES		XX		X		+	X	X	+	Н	X	X	+	H			MADETINE PLACES ON MENDIBOURN RESERVOIS
	PURIFIE PIDGE S/4 KES.		χx		1		_	X	X	$\perp$		Î	ΪX		Ц	1×	X	MADELLINE ISLATING GW
	JUNITER RIDGE C/2 RES		XX		1		1	X		Д.	_	X	X	T	П	_		MALE INF PLATES ON
	CONTREA RIDGE 175 RES.		XX		, X		+	X	X	+		X	X	+	H			MADELINE PLACES GW
	JUNE 125 RECENT OF REAL	SEAUCHAL RESERVOIR EMERGENT	хх		7			X	x			X	X	1	П	1	Ι×	MADELINE PLAINS GW
	JUNIORE PIOSE 176 R78. JUNIORE PIOSE 179 P75		XX		-   1		1	X		7		X	X	-	Н			MADELINE PRACKS GW
	JUNITER PICE 179 REEL	SON DELIGIES PRESENTATE PRESENT	XX		1		+		x	+		x	<del>  î</del>	╅	H			MADELINE PLATES OF MADELINE PLATES OF
	JUNISEA NIBUE 77 KSA.		XX		7		#		X			X	ĺΧ	$\perp$	□			MADELINE PLATNS OK
	MC (XNA; D PRAK 061 SES		XX		2		+	X	X	+		X	X	+	H		×	MENDIBOLEE RESERVEIR MADELINE PLAINS ON
	PROPER RIDGE 181 MES. PROPER RIDGE 82 MES.	- Granden - Carallana - Carall	x x		1		+		x	+		x.	<del>∣â</del>	+	H			MADELINE PLAINS ON
	MC DONALD TEAK 444 JAN		X X		- 2		ightharpoons		X	7		X	X	#	П			VAN LOAN KESLEVOLK
	MY DONALD PEAK 053 NES MC DONALD PEAK 052 NES.	SZASONAL, KESTROOFR/EMENCEST SZANONAF, RESERVOLP EMERGENT	XX		- X		-		X	+		X	X	+	₩			VAN LOAN RESERVOIR VAN LOAN RESERVOIR
	KADEGINE PLAINS HU (continued)	TOO TOTAL TO A CONTROL OF THE CONTRO	1	Н	+	Ή	$\pm$	1	٦	$\perp$	Н	7	17	$\pm$	Н	+	T	
	MC DOWN DOWN 04 F 23 MILE RES		XX		3			X		$\blacksquare$	$\Box$	X	X	_	П			WAN LOAN CROFF
	MT DONALD PRAK 044 RES MT DANALT FEAX 045 REG.	SZASONAL MENEMYÜLKZEMENGENI SYASONAL NYSENVOLKZEMERGENIT	XX		2		+	X	X	+	Н	X	X	┿	Н		X	3 YOUR OPERA 3-YOUR CREEK
	MC DONALE FERY DAG RES.		XX		×		$\pm$	х	х	$\pm$	$\top$	x	x	土		7	X	MADELINE PLACES OF
	MC DONALD FEAK 044 HEN.		XX		X		+	X	X	+		X	X	+	H			3 MOTE CREEK 3 MOTE CREEK
	MC DONALD FEAK 041 RES MC DENALD FEAK 051 RES		X X		1		+	1		+		x	<del>    x  </del>	┿	H			MADELINE PLACES GW
	MC DUNALD PERV 182 RES.		X X	_	1		7	X		$\Box$		X	X	$\perp$	П			MADELINE ISAINS ON
	MC DOMALD PEAK 09% NES. MC DOMALD PEAK 00% NES.		XX		×		+	X	X	+		X	X	+	Н			MADELINE PLAINS ON
	MC (XINALD PEAK 101 RES	SASONAL AZSEZACI R/ENESCENT	X X		×		$\perp$		X	$\pm$		x	X	$\pm$	Н			MADELINE PLAINS ON
	M: DuttALD PEAN 103 RES.		XX		X		1	X		$\Box$		X	X	Τ.	П			MADELINE PLATES ON
	DAY CROSE SPRINGS MC DYNALS PEAK SOF WESTARDS	DITTING CONTRACTOR	XX		¥			×	Ŷ	+	+×	2	x	<del>- x</del>	H			SAY CREEK MADELINE PLAINE ON
	MC DONALD PERA SOT WETLANDS		ХX		X			x	х	$\perp$	$\top$	X	1xi	$\pm$	$\Box$	7	×	MADELINE PLATES ON
	HIG SPRINGS	SPRING/EMERGENT	XX		- X		4	X		4		X	X	+	Н			VAR LOAD CHEEF MADELINE PLAINS ON
	JUNIPER RIDGE THE WET ANDS: JUNIPER RIDGE THE WET ANDS		x x		1		+		x	+		x	<del>  ÎX</del>	╈	H			MADELINE PLACES OF
	JUNIPER PILOF SON WET: ANGS	SPR NO/PNERGENT	XX		1				X	$\Box$		X	X	$\bot$	П			MADELINE PLAINS OW
	JUNIPER PIDGE 510 METLANDS JUNIPER RIDGE 511 METLANDS		XX		X		+	x	X	4		X	X	+	H			MADELINE PLATES OF
	COURT SENTAGE WITH TOWER DRA , W. SAR		XX		72			х	x	+	П	x	]×	1	H			DRY CREEK
	MC DONALD /EA+ DE-R NPRING	SPH 1 NOVEMESH-ENT	ХX		1		1		x			x	X	T	П	7	X	VAN LOAN CHELK
	JUNIFER RIDGE SIZ WETLANDS		XX		X		+		X	+		X	X	+	╁			PART OF PLATES OF
	PUNITUR RIDGE DIS WETLANDS	GPRING EMERGENT	ХX		Ţ		$\pm$	X	X		71	х	x	$\pm$	Ц	1	x	DRY CKEEP
	JUNESPER HIDGE NOWL STRIPS:		XX	_	7	-	+	X	X	1	H	X	X	+	H	_	-	ERY CHECK MADELINE PLACK - GW
	JUNEFER RIDGE EN SIDN SPA. DODGE NESSMULIK MADELING SPRING		XX		X		+	x	х		$\perp$	x	1×		Н	,	×	COLD SIMINGS CRAFK
	SAUTTRISER KEN CAY NES		XX		ž		$\perp$		X	1		X	X	Ŧ	П	_	_	DRY VACLEY ON
	WHITINGER MIN C48 KEN		XX		X		+	x	X	+		X	X	+	H			DRY VALLEY OW DRY VALLEY ON
	DAID VALLEY 4011 REF	KEST KAC I KO PYT KENNT	ХX		T x		士	x	x	$\perp$		x	X	土	⇈	7	X	SACD VALLEY RESPRECE
	W. IX:WV:T) NEWF CoP SEA		XX		-   2		T		X	T	П	X	X	T	П			MADELINE PLAINS ON MADELINE PLAINS ON
	40 DONALD PERA 099 RES JUNISPER RIDGE 146 RES		XX		Y		+		X	+		X	×	+	H			MADELINE PLAINS ON
638.00	MADELINE PLAINS EU (continued)			П		П		Τ			П	⇉	П	1	П	Т	Г	
	auggebe eiter 249 RES Jim Mek eiter 398 RES		XX		- 7		+	X	X	+		X	X	+	Н			MADELINE PLAINE ON MADELINE PLAINE ON
	JAMEER RIDGE 090 RES		x x		x			x	х			X	x		H			MADELINE PLAINS ON
	NO DOMALD PEAK COM SES		XX		- 13		T		X	Ţ		X	×	T	П			MADELINE PAINT ON MADELINE PAINT ON
	SC DONALD PARK 99° AFS NO DONALD FRAK 991 SES		XX		7		+		X	+		X	X	+	H			MADELINE PLAINS ON
	' M VER FIDGE SHE RES	NEANONAL RESERVOLE CHERGENT	ХX	╚	7	1	$\pm$	х	х	$\Box$	Т	x	×	$\pm$	口	×	×	MADELINE PLAINS ON
	THE PRO BLOCK OF THE BES		XX		7		+		X	+		X	<del> X</del>	+	H			MADELINE PLATES ON MADELINE PLATES ON
	MINOR SOMEWAR MALENS TANGENS MICHAEL HES		XX			x	+		X		×		<del> </del>	+	-	1	L	
	NINGR WITHARDS		X X			Х		x			x		x	1		X X	X	MADELINE PLAIRS DV
637 00	SUBLIVILLE KYDROLOGIC UNIT	: 1   (   1   1   1   1   1	1	-	7	i												:   :     .
037.00	AND DESCRIPTION OF STREET																	
	HERLONG HYDROLOGIC AREA		v i	إلتج	4	Į.	ابد	Ţ.	Ц	Ŷ	Ţ.	Ų	Ü	4	щ	X	۳	LONG VALLEY CRPEX
	PURDY CREEK EVANS CANYON CHEEK		XX			X		÷	÷	<del>}</del>	₩	<del>-</del>	X	+		X	+	LONG VALLEY CREEK
	BMLLS CHPSK	PERFENDIAL STREAM	хх		7	x		x	I	x		х	[x]	1		х	L	DONG MAINEY CORER
	WILLIAM RISER		XX			X	+		X		x	X	X	+-		X X X	1.	LONG VALLEY CREEK
	LORG VALLEY CREEK WETLANDS LORG VALLEY CREEK		x x			X	盘	x			x		X	$\pm$		x		BONES TAKE
-																		

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

Г	HYDROLOGIC UNIT/SUBUNIT	WATERBODY				В	enei	ıc	EAL	ŲŞI	ES				RECEIVIN	 G
eo un	drainage feature	CLASS MODIFIER	MET AND A	016	DWR FRER	A	1-011	CORK	Agus	COLO	2 2	RABE	10 TO 10 TO	10	WATER	
	LONG VALLEY CROCK SEPINSSYRITMRIAM FREBLEN REDADDLE CRESK	WETLANDS PERENNIAL STREAM	X X		X X	П		X X X X	_ X	X	X	П	Ţ	×	X FAING VALUEY CREEK	
	MINOR SURFACE WATERS		χx		χx	Н		x x	+	x.	ᅻ	×	1×	Н	HERITAR GROUPPWATER	
	MINOR WETLANDS	SPRINGS / SEEDS, EMERSION / MARSHES	XX		ХX	Ц	X	ХX	. Х	х	X	X	×	x	x	
637.20	SUSAN RIVER HYDROLOGIC AREA		1 :	:	1 :		1	:	! !			,	:			
	COVER LAKE	LAKE	X		X	П	X		T	х	ŢŸŢ	П	X		SUSAN RIVER	
	MCCOY FLAT ROHEPASIP CARIBOT LAKE	FUNCTION RESERVOIR	X X	HH	X X	Н	X	X X	+	X	X	Н	<del>   </del>	Н	SUDAN RIVER SUSAN RIVES	
1	ISTAND AT HOREY LAKE WETLAND'S	WETLANDS	хх	Н	х		X	х		X :	х×	廿		x	x	
	NORVELS FLAT WETLANDS	WETLANDS WIT MERCONS, PLAYOPLAINS	X X		X X	Н		X	<del> </del> *	x	X	x x	+	X	X SUSAN RIVER	
	HOS PLAT RESERVOIP	EPHEMERAL RESERVOIR	ХX		х	ш	X :	X X	1	х	Ŧ	Ť	X	х	X SUSAN RIVER	
	HMI.K-ENT 7RIRGARG WEZ MEADOWS/WETLANDS WILLIAND CARER	WET MEADOW PERRONIAL STREAM	XX		XX	Н	X		+	X	X	₩	x x		X HOG FLAT RESERACIA	
637.20	MURAN RIVER HA (continued)				Н	⇈		$\mathbf{I}$		Ĥ	$\Box$	Ħ	7	H	MINNE KINER	
l	CHENEY CREEK	PERENMIAL FORGAM SPRING	XX		X X	H	X	x x	+	X	X	+	X	Н	SUSAN PIVER SUFAN RIVER	
l	PE IFS CREEK	PERSONIAL STREAM	хх		X X		X :	хх	+	х	x	Ш	X X	П	SUCAN PINE	
l	BARRY CREPY SOLD RUN CHEEK	PERRINTAL STREAM PERRINTAL STREAM	XX		X X	-		X X	+	X	×	$\mathbb{H}$	X		SUSAN RIVER SUSAN NEVER	
l	A S - F CSH K	PLEASTRIAN STREAM	ΧХ		ХX		Y.	ХX		x	TX	Ħ	X		SUSAN RIVER	
l	INISAN RIVER	PERENNIAL RIJAR RESERVOIR	XX		X X		X	XX		X	X	44	X X		ROBER LARS	
l	HARTSON DAKE WETDARDS	WETLANCE	ХX		x	H	x   2			x	<del> </del>	H	٦Ť	x		
1	HARCHON LAKE HET (AND)	RESERVOTE WETCHNES	X X	П	хх	Ŧ	X 3			X	XX	×	Ţ.	×	HONEY TAGE	
1	HOMEY LAKE	SACINE 'AKE	х		хx	H	X	хx			××	11	<del> </del> ^	$\Box$	X OFFICEANIA DEFINIA LAFE	: ;
I	WERDEL FOR SPRINGS STILLAN CHEFT	HOT SPEINIS FERFESIAL STREEM	XX		XX	,		X .		П	X	П	×	x	HONEY LAZE SUSAN REVEN	
1	WILLAW THEFF VINOR PUREACE WATERS	conclusion SIRCON	X X		X X		X 2	XX		x	X	╅┥	<del>- *</del>	Н	SOSAN RISER	
1	MINCH WESTANDS	SPRINGS/SEEPS/EMERGENT/MARSHES	хх		x x		x z				X	х	X	х	x	
637.30	MAGLE DRAINAGE HYDROLOGIC AREA				: 1				: :						: 1 : 1	اسر
637.31	ANTELOPE HOUNTAIN HYDROLOGIC SUBAREA SPRINGS	sparnos	X X		X X		X z	K] I		X	[x]		7	Н		
[	SHELLY CAMP PRAIXING WETLANDS	NET MEADOW	ХX	$\Box$	X	1	X 1	ĸП		X	TX.	X T	$\Box$	×	X STEAR RIVER	
l	PITTVILLE ROAD SPRING	EPHEMERAL STREAM SPRING AND WELL MEADON	X X		X X	+	X 2		+	X	X	<del>.    </del>	+	×	SNOWSTORK CAPER  X SUSAN PIVEP	
1	LONG LARGE	war Maalxin, Krasinial (Akt	ΣX	$\neg \neg$	Ĭ	$\blacksquare$	X  2	₹ 1	$\blacksquare$	×	×	$\Box$	$\bot$		X GROUNDWATER	
l	PINE CHEEK DOWNSTALAM OF MG JOY	PERFORCAL STREAM PERENRIAL STREAM	XX		x x	+	X X			X		x X			EASILE LAKE	
1	IW. JOSEP MEADOWS NETTLANDS	WET MEADOW	XX		хх		X   2	ĸХ	上	х	X	z x	×	x	X EAGLE LAKE	
	PAPOCSE CREEK MERKILL CREEK	FPHEMERAL STREAM	XX		XX		X 2	ΧX		X	X	X	×	Н	FAGUE LAKE	
	MINOP SURFACE WATS+>	·	хx		хх		X 2	×х	土	х	x	П	I	Ħ		
l	MIROR WELL ARISE	JPRINGS/SEEPS, EMLEGENT MARSHED	[X]X	l I	X X		X	K[X]		х	X   3	( X	x x	X	<u>x </u>	
627.70			_	_		_										
	EAGLE LAKE HYDROLOGIC SUBAREA	التلطنات المستحد المستحد		1			11:		i i							- :
l	ENGLE LAPS MINOP SUNTACE WATERS	ne Kli	XX			X	XXX		+		X:	x x	X X		INTERNALLY DRAINTS CARE	,
637.32	EXCLIFIANT MINOP CONFACE WATERS  EXCLIFIANT HEA (continued)		ХX		х×	X	X ?	K		x	×	X	X X	Н		,
637.32	EAGLE LAPP MINOP GUNTACE WATERS	LARIS  MCTTLANDS				X		K				x x	x x	x		,
637.32	BAGE I FAR? MINDP TORTACE HATERP EAGLE LANK REA (continued) MINDE MULTARIE MANDPORM MONOTAIN EYROLOGIC AREA	NOTELA NOCE	x x		x x	X	X X	K	1	x	x	c x	X X	Н	x	7
637.32	BAGIS FANS MINOR CHERACE MATERY EAGLE LATE MEA (continued) HINGH MECHANIS  MINOR MECHANIS  MEMORYDAM MANNYAIN EXPROLOGIC AREA  MENORYDAM MANNYAIN EXPROLOGIC AREA	ACTEL A FIDEL	x x		х×	X	X	K X	1	x	x	K X	X X	Н		7
637.32	BAGI F LAPS  MANOR PORFACE MATERY  EAGLE LANK REA (continued)  MINGH VERTABLE  MINGH VERTABLE  DEFF CREEK  EXCHIPTIONS MONOMFAIN EVENOLOGIC AREA  DEFF CREEK  EXCHIPTIONS FORLER  EXCHIPTIONS FORLER	PRIMERAL PINSAN PROMERAL PINSAN PROMERAL PINSAN	X X X X X X X X X X X X X X X X X X X		x x x x	X	X 2	K X X		x x x	X X X X	C X		x	SUCRECAME THERE SUCRECAME THERE SUCRECAME THERE	;
637.32	BAGE F LANS MINOR FURRACE MATERY EAGUR LANE EAG (continued) MINOR FORTAGE MAN (continued) MINOR FORTAGE MINOR MONOTAIN ETHOLOGIC AREA CHOPP CREAT MINOR CONTROL CONTROL MINOR CONTROL MI	RETLANDS  FRANCISCA PITEAN  TRANSPIRAL FRANCISCA  DESIRAN STEAM  MATLAND	X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x x x	X	X X X X X X X X X X X X X X X X X X X	K X X X X X X		x x x	x x x x	( X		x	SUCRECAME THERE SUCRECAME THERE SUCRECAME THERE	,
637.32	BAGE F AND MINOR PORPAGE HAVERY EACH LAND EACH LAND EACH LAND EACH LAND HOST AND ADDRESS OF THE AND ADDRESS OF THE ADDRESS OF	PURMERAL PERSAN TEMPORERAL PERSAN TEMPORERAL SERIAM METLANDO TEMPORAL SERIAM METLANDO TEMPORAL SERIAM FERRANICAL SERIAM	x x x x x x x x x x x x x x x x x x x	x	x x x x x x x x x x x x x x x x x x x	X	X 1 X 1 X 1 X 1 X 1 X 1 X 1 X 1 X 1 X 1	x	X X	x x x x x	X X X X X	x x	x	x	X  SINNESTHME THESE SINNESTHME THESE SINNESTHME THESE SINNESTHME THESE SINNESTHME THESE SINNESTHME	
637.32	BAGE I FARS  MINOP TORRACE MATERY  EAGLE MAYE THAN (consisted)  MINOR METABLE  BECHNOLOGIC AREA  DEPT CREEK  BECHNOLOGIC CHEK  BECHNOLOGIC	PUMENTAL PETERM DEFENDAL STEAM DEFENDAL STEAM DEFENDAL STEAM DEFENDAL STEAM TREAMING THEM TREAMING STEAM	x x x x x x x x x x x x x x x x x x x	x	x x x x x x x x x x x x x x x x x x x	X	X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K X X X X X X X X X X X X X X X X X X X	x	x x x x x x	X X X X X X	X X	x	x	X  SENNESTYME CHARA SENNESTYME CHARA POTES CHEEK  ALLUM CHEEK ALLUM CHEEK ALLUM CHEEK	7
637.32	BAGE I FARS  MINOR FORFACE MATERY  EAGLE LATE TANA (consisted)  MINOR FORFACE MAY EXCLOSED THE STATE OF THE S	POWERER PETERM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM	x x x x x x x x x x x x x x x x x x x	x	x x x x x x x x x x x x x x x x x x x	X	X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	K X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x	X X X X X X X		X	x	X GOODED CERTIFICATION  PAGES CHECK  ACTURE CHECK  ACTURE CHECK  ACTURE CHECK  X  X  X	7
637.32	BAGE I FARS  MINOR PRISEAGE MATERY  EAGLE LANK REA (continued)  HINGH VERTARIER  DOWNFORM MARTTAIN EXPROLOGIC AREA  DOWNFORM MARTTAIN EXPROLOGIC AREA  DOWNFORM CORPA  HINGH VERTARIER  HINGH CORPA  HIN	PUMPINEAL STREAM POURMERAL STREAM POURMERAL STREAM POURMERAL STREAM RECARDA RECARDA POURMERAL STREAM POURMERAL STREAM STREAM STREAM POURMERAL STREAM	X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x x x x x x x x x x x x	X	X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	K X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x	X X X X X X X X		X	x	X SINNSTONM CHFRS SINNSTONM CHFRS PETES CHERK  X HILLIAN CHEER JENNSTONM CHEER JENNSTONM CHEER JENNSTONM CHEER JENNSTONM FORT	7
637.32	BAGE I FARS  MINOR FORFACE MATERY  EAGLE LATE TANA (consisted)  MINOR FORFACE MAY EXCLOSED THE STATE OF THE S	POWERER PETERM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM DESEMBLE STEEM	X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x x x x x x x x x x x x	X	X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K X X X X X X X X X X X X X X X X X X X	x x	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X		X	x	X SINNESTYMM CHARASISSISSISSISSISSISSISSISSISSISSISSISSIS	
637.32	BAGE I FANS  MINOR PRINCIPALE MATERY  EAGLE LANS EAS (CONSINUES)  MINOR PRINCIPALE MATERY  BACKET LANS EAS (CONSINUES)  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPALE  MINOR PRINCIPAL PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIPAL PRINCIPAL  MINOR PRINCIPAL PRINCIP	RETLANDI  PROGREGA PITERAN  PROGREGA PITERAN  PROGREGA TELEM  PROGREGA TELEM  METLANDI  PROGREGA TELEM  PETANTA	x x x x x x x x x x x x x x x x x x x	x	x x x x x x x x x x x x x x x x x x x	x	X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	K X X X X X X X X X X X X X X X X X X X	x x x	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X	x	X	X X X	X  SENNOSTHER CHEE SENNOSTHER CHEE POTES CHEEK  X  LILLION CHEEK  X  CLOUED CHEEL SINNAS HIVES  KELLION CHEEK  X  KOLOUED CHEELSION FORE CHEES  X  KOLOUED CHEEK  KILLION CHEEV  KILLION CHEEV  KILLION CHEEV  KILLION CHEEV	
637.32	BAGE I FANT  MAKER PURCHAGE MATERY  EAGLE LANE KEA (CONSINUES)  MINOR PURCHAGE  MOMENTORM MONTAIN EXPROLOGIC AREA  DEPT CHEEK  MERCH CH	RETLANDS  PROFIDERAL PETERN  TOPOGRERAL PETERN  TOPOGRERAL STEAM  METLAND  PROFINCAL STEAM  METLAND  OFFICIALS  TOPOGREAL PROFI  TOPOGREAT PROFI  TOPOGREAL PROFI  TOPOGREAT PRO	x x x x x x x x x x x x x x x x x x x	×	X X X X X X X X X X X X X X X X X X X	x	X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	K X X X X X X X X X X X X X X X X X X X	X X X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X	x	x x x x x x	x x x	X INTERNALL O DRAIN I LAK	
637.32	BAGE I FARS  MANOR PORTAGE MATERY  EMPER CANTE REA (continued)  HINCH VORTAGES  HINCH VORTAGES  COPP SHEEK  BETHAT CHALF  SEMENTORM MONITATE EYEMOLOGIC AREA  COPP SHEEK  BETHAT CHALF  SEMENTORM (MER NOT LAND)  HINCH CHALF  MILLIAN ACTORS  LOCKET PARK LOTTERNO  HOSTELIAN EXTERNO  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK CHALFORD  LOCKET SHEEK SHEEK SHEEK  LOCKET SHEEK SHEEK  LOCKET SHEEK SHEEK  LOCKET SHEEK SHEEK  LOCKET SHEE	RETLANDS  PROPRIEMA PITEMA  TOPOGREGA PITEMA  TOPOGREGA PITEMA  TOPOGREGA PITEMA  TOPOGREGA PITEMA  TOPOGREGA PITEMA  TOPOGREGA PITEMA  MOTIANTA  TOPOGREGA PITEMA  MOTIANTA  TOPOGREGA PITEMA  REPROPRIATE  TOPOGREGA PITEMA  REPROPRIATE  TOPOGREGA PITEMA  REPROPRIATE  TOPOGREGA PITEMA  REPROPRIATE  TOPOGREGA PITEMA  TO	x x x x x x x x x x x x x x x x x x x	×	x x x x x x x x x x x x x x x x x x x	x	X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2 X 2	K X X X X X X X X X X X X X X X X X X X	X X X	X	X X X X X X X X X X X X X	x	x x x x x x	x x x	X INTERNALL O DRAIN I LAK	
637.40 637.40	BAGE I FANS  MINOR PORFACE HAVERS  EAGLE LANS EAGL (CONSINUED)  MINOR PORFACE HAVERS  EAGLE LANS EAGL (CONSINUED)  MINOR PORFACE  MINOR PORFA	RETLANDI  FEMERRAL PITEAN  ZERIMBRAL PITEAN  ZERIMBRAL STREM  ZERIMBRAL STREM  ZERIMBRAL STREM  ZERIMBRAL STREM  METLANDI  FEMERLAL STREM  METLANDI  FEMERLAL FITEAM  METLANDI  FEMERLAL FITEAM  METLANDI  FEMERLAL FITEAM  RESIMBRAL STREM  RESIMBRAL STREM  RESIMBRAL SAN  DEV. SENSINI, LAKE  DEV. SENSINI, LAK	X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X		X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3	K X X X X X X X X X X X X X X X X X X X	X X X	x x x x x x x x x x x x x x x x x x x	X	X	X X X X X	X X X X X	SENSON CPPES SENSON CPPES SENSON CPPES POTES CHEEK X MILLION CHEEK X COURS DEPTICUSION PETES TAKE X N-COURS DEPTICUSION FORD TAKE X N-LIVE CREAT X N-LIVE CREAT X X N-LIVE CREAT X X X NTERNALL COPPINIT LAG	
637.40 637.40	BAGE I FARE  MINOR PRIFACE MATERY  EAGLE LANE REA (continued)  HINDER VERTARIER  ENGRETHMEN MANTATAN REDROGOGIC AREA  CONFESCIONER  CONFESCION	ACTILARDI  FOURNERAL STEAM  FOURNERAL STEAM  FOURNERAL STEAM  SOSIMERAL STEAM  METLAND  FEGINICIAL FYEAM  FEGINICAL FYEAM  FYEAM  FEGINICAL FYEAM  FYEAM	X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	x	X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3	K X X X X X X X X X X X X X X X X X X X	X X X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X	X  SINNESTYMM CHARA SINNESTYMM CHARA POTES CHECK  POTES CHECK  ALLIAM CHECK ALLIAM CHECK  X  COURT CARC HOTEL CARC  X  INTERNALLY DRAIN LARA  X INTERNALLY DRAIN LARA  X INTERNALLY DRAIN LARA  X INTERNALLY DRAIN LARA  X	
637.40 637.40	BAGIS FARS  MINOR PRISEASE MATERY  EAGLE LANK REA (continued)  HINGE VERTARIES  MONOPORM MONOTATH EYROGOGGG AREA  DORNOFORM MONOTATH EYROGOGGG AREA  DORNOFORM MONOTATH EYROGOGGG AREA  DORNOFORM CONTROL  MONOPORM  MONOPORM CONTROL  MONOPORM	ACTLANDI  PUJANNAL PERAM  DERIMBAL PERAM  DERIMBAL PERAM  METLANDI  PERAMIA PERAM  METLANDI  PERAMIA POLI  SERIMBAL POLI  SERI	X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	X	X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3	K X X X X X X X X X X X X X X X X X X X	x x x	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x	X  SENNESTYME CHARACTER  SENNESTYME CHARACTER  POTES CHEEK  ALLUM CHEEK  ALLUM CHEEK  ALLUM CHEEK  ALLUM CHEEK  X  COURT CHEEK  X  COURT CHEEK  X  ALLUM CHEEK  X  COURT CHEEK  X  INTERNALLY DEPART LAKA  X  INTE	
637.40 637.40	BAGE I FANS  MAKER PURCHAS HANDER  EAGLE LANS  MAKER PURCHAS HANDER  EAGLE LANS  MAKER PURCHAS HANDER  MAKER P	RETLANDI  PENDINERA PETERAN  DEPRINERA, STREAM  DEPRINERA, STREAM  DEPRINERA, STREAM  DEPRINERA, STREAM  WETLANDS  VERNAL FOLLOWE  WETLAND,  VERNAL FOLLOWE  WETLAND,  VERNAL FOLLOWE  WETLAND,  VERNAL FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  WETLAND,  FOLLOWE  FO	X X X X X X X X X X X X X X X X X X X	x	x x x x x x x x x x x x x x x x x x x	x	X 3 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X	K X X X X X X X X X X X X X X X X X X X	x x x	x x x x x x x x x x x x x x x x x x x	X	x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	X SENSON OF PER	
637.40 637.40	BAGE I FANT  MAKER PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  HINGE PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  HINGE PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  MAKER PURCHAS HATERF  MAKER PURCHAS HATERF  HINGE CONSINUE HATE	RETLANDI  PROBREGA PITERAN  TOPRIMERAL STREAM  ZOSRIMBRA, STREAM  ZOSRIMBRA, STREAM  METLAND  PROBRICAL STREAM  OFFIANT  SERVICE	X   X   X   X   X   X   X   X   X   X	X	X X X X X X X X X X X X X X X X X X X	X	X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3	K X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	x x x	X  SENNASTHER CHEE  SENNASTHER CHEE  PETES CHEEK  X  XILUM CHEEK  XILU	
637.40 637.40	BAGE I FANS  MINOR PRIFACE MATERY  ENGLE CANE REA (continued)  HINCH VERTARIES  HINCH VERTARIES  DEPT GREEK  BERRY CHARLE  BERRY	POWERER PETERM DEFENDED TERM D	X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	x	X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3	K X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X	X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X  SINNSTPONE CPPES SINNSTPONE CPPES PRIES CHEEK  ACLUSE C	
637.40 637.40	BAGE I FANT  MAKER PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  HINGE PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  HINGE PURCHAS HATERF  EAGUE LANT MAKE (CONSINUES)  MAKER PURCHAS HATERF  MAKER PURCHAS HATERF  HINGE CONSINUE HATE	RETLANDI  FEMENRAL PETRAM  ZEPANRAL PETRAM  ZEPANRAL PETRAM  ZEPANRAL PETRAM  ZEPANRAL PETRAM  ZEPANRAL PETRAM  ZEPANLAL PETRAM  WETLANDI  METLANDI  X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	x	X 2 2 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X	K X X X X X X X X X X X X X X X X X X X	X X X	x x x x x x x x x x x x x x x x x x x	X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	X  SENNASTORM CPPER SENNASTORM CPPER POTES CHEEK  ACLUSE CREEK  ACRUS CRE		
637.40 637.40	BAGIS F LANS  MANOR PURPAGE MATERY  EAGLE LANS MANORATH MIDROLOGIC AREA  DEMANDATION MANORATH MIDROLOGIC AREA  DEMANDATION MANORATH MIDROLOGIC AREA  DEMANDATION CHEEK  MIDDLE CHEEK  MIDDLE CHEEK  MIDL	RETLANDS  PROFIDERAL PITEAN  TOPOGRESAL PITEAN  TOPOGRESAL PITEAN  TOPOGRESAL PITEAN  TOPOGRESAL PITEAN  TOPOGRESAL PITEAN  METLAND  TOPOGRESAL PITEAN  METLAND  TOPOGRESAL PITEAN  METLAND  TOPOGRESAL PITEAN  TOPOGRESAL PIT	X	X	X X X X X X X X X X X X X X X X X X X	x	x 2 2 x 3 x 3 x 3 x 3 x 3 x 3 x 3 x 3 x	K X X X X X X X X X X X X X X X X X X X	x x x x x x	X	X	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X SINNSTONE CPERS SINNSTONE CPERS SINNSTONE CPERS POTES CHEEK  X HILLIAN CHIEF SINNSTONE CPERS HILLIAN CHIEF SINNSTONE CPERS HILLIAN CHIEF SINNSTONE CPERS HILLIAN CHIEF SINNSTONE CPERS HILLIAN X INTERNALLY CREATED THAN LITTLE CHIEF SINNSTONE CHIEF LITTLE CHIEF SINNSTONE CHIEF LITTLE CHIEF SINNSTONE CHIEF LITTLE CHIEF SINNSTONE CHIEF LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE CHIEF SINNSTONE LITTLE LI	
637.40 637.40	BAGE I FARS  MINOR PRIMARE MATERY  EAGLE LANK RAW (continued)  MINOR WRITTARIES  MINOR WRITTARIES  MINOR WRITTARIES  MINOR WRITTARIES  MINOR PRIMARE MANAGEMENT EYROLOGIC AREA  DEPPE GREEK  MINOR FOR CHEEK  MINOR FOR CHEEK  MINOR WRITTARIES  MINOR	RETLANDS  PROPRIETAL PITEAN  TOPOGRETAL PITEAN  TOPOGRETAL PITEAN  TOPOGRETAL TEAM  METLAND  PERSONAL STEAM  METLAND  OFFICIALLY  OFFICIALLY  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  TOPOG	X X X X X X X X X X X X X X X X X X X	X	X X X X X X X X X X X X X X X X X X X	X	X 3 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X 3 X	K X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X  SINNESTHER CPERS SINNESTHER CPERS SINNESTHER CPERS PRICE CHEEK  X  ALLING CHIEN SPERS S	
637.40 637.40	BAGE I F AND  MINOR PROPERTY BY ANY PROPERTY B	RETLANDI  FEMERRAL PITEAN  ZEPARREAL PITEAN  ZEPARREAL STEAM  ZEPARREAL STEAM  ZEPARREAL STEAM  ZEPARREAL STEAM  METLANDI  FEMERIAL STEAM  METLANDI  VERBILLA FIVEAM  METLANDI  VERBILLA FOLL PRE  METLANDI  REPERANDI  REPE	X	X	X X X X X X X X X X X X X X X X X X X	X	X 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X  SINNESTHER CPERS SINNESTHER CPERS SINNESTHER CPERS PRICE CHEEK  X  ALLING CHIEN SPERS S	
637.40 637.40	BAGE I FARS  MINOR PRISEAGE MATERY  EAGLE LANK REA (continued)  HINDER VERTARE REA (continued)  HINDER VERTARER  MONAPHORM MONTATER REPROLOCIC AREA  DOWN CONTINUED  MONAPHORM MONTATER REPROLOCIC AREA  DOWN CONTINUED  MONAPHORM MONTATER REPROLOCIC AREA  DOWN CONTINUED  MONAPHORM MONTATER REPROLOCIC AREA  MONAPHORM CORP.  MONAPHORM CORP.  MONAPHORM CORP.  MONAPHORM CORP.  MONAPHORM MONAPHORM WE PARADER ON WEST  MONAPHORM MONAPHORM MONAPHORM WE PARADER  MONAPHORM MONAPHORM MONAPHORM MONAPHORM  MONAPHORM MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHORM MONAPHORM  MONAPHOR	RETLANDS  PROPRIETAL PITEAN  TOPOGRETAL PITEAN  TOPOGRETAL PITEAN  TOPOGRETAL TEAM  METLAND  PERSONAL STEAM  METLAND  OFFICIALLY  OFFICIALLY  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  METLAND  TOPOGRETAL STEAM  TOPOG	X X X X X X X X X X X X X X X X X X X	x	X X X X X X X X X X X X X X X X X X X	X	X 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	K X X X X X X X X X X X X X X X X X X X	X X X	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X  SENNEST HE CHEE  SENNEST HE CHEE  POTES CHEEK  ACLUSE CHEEK  X  X  CLOUDE CHEEK  X  CLOUDE CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  N.LLIGH CHEEK  X  INTERNALLY OPPINIT LAG  X  X  THE CHEEK CHEEK  X  X  THE CHEEK CHEEK  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  LITTLE THANKEN PLUGH  X  X TAMBELLE PROPERTY PLUGH  X STAMBELLE PROPERTY PLUGH  X ST	
637.40 637.40	BAGIS FARS  MANOR PRIMARE MATERY  EAGLE LANC MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MAN (continued)  MINOR PRIMARE MATERIAL PRIMARE  MINOR PRIMARE MATERIAL PRIMARE PRIMARE MATERIAL PRIMARE PRIMARE MATERIAL PRIMARE PRIMARE MATERIAL PRIMARE PRIMARE PRIMARE MATERIAL PRIMARE P	PENJAMBA PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  REPENDANA PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  PENJAMBAN PITEAM  METLAND  PENJAMBAN PITEAM  PENJ	X	X	X X X X X X X X X X X X X X X X X X X	x x	X 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	X X X X X X X X X X X X X X X X X X X	XXX	X	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X	SINNSTAND CPERS SINNSTAND CPERS POTES CHEEK  X  MILLION CHEEK X  MILLION CHEEK X  MILLION CHEEK X  MILLION CHEEK X  MILLION CHEEK X  MILLION CHEEK X  MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK X  MITERANILL CHEEK X  MITERANILL CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION CHEEK MILLION MITERANICA X  MILLION MI	
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637.40 637.40 636.00 635.00 635.20	BAGE I FANS  MANOR PURPAGE MATERY  EAGLE LANE KEA (CONSINUED)  MINOR PURPAGE MATERY  EAGLE LANE KEA (CONSINUED)  MINOR PURPAGE MATERY  EAGLE LANE KEA (CONSINUED)  MONORPHOAN MANORAL REPROLOGIC AREA  DOWNFORD CHEEK  MINISTER CHEEK  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANTS  MINISTER CHEEK MINISTER  MINISTER CHEEK MINISTER  MINISTER SAFER HAPTIANTS  MINISTER SAFER HAPTIANT	RETLANDI  PROBREGA PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  DEGENERAL TITERAN  SETTAMAN  SETAMAN TITERAN  SETAMAN TITERAN  SETAMAN TITERAN  RESIDIAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  TOPRIMERAL PITERAN  SETAMAN TITERAN  TOPRIMINAL PITERAN  TOPRIMINAL SETEMAN SETEMAN  TOPRIMINAL SETEMAN SETEM	X   X   X   X   X   X   X   X   X   X	X	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X	X   X   X   X   X   X   X   X   X   X		XXX	X X X X X X X X X X X X X X X X X X X	X	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	x x x x x	X  SENNASTIONS CHEEK  SENNASTIONS CREEK  PETER CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK  X  MILLING CHEEK	

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY		_			В	ENI	EF)	CI	λL	υ£	ES						RECEIVING
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F	DONKER CHEPK		ХŻ		×	Т	+	X	X	X	4	X		₩			X		THICKES HIVER
	PROSES REEL PROSES RECEIVED	PERINNIAL STREAM	XX		X		I	¥	ж	х	Ţ	x		х	2	( X	X		PRICKET FINER
	PROGREM RECENTORS  WART 19 CREEK		X 3		HX		×		X		+	X		쐈			X		PRONSER CREEK
	XAPCIS CREEK RESILEVOIR	RESERVOIR	ХX		T X		x		×		+	×		<del>x</del>			x		MARTIN CHERK
	THOUT CREEK		X X		×		$\Box$		X		I	×		X.	X	I	X		TRUCKER NY.EX
	TOTAL CAPER ATTEMPT CAPER	PERFORMATION STREAM	X X		X		+		X		┿	X		X	×		X		CRUCKEE RIVES
	GRAY CREEK	PERENDIAL STREAM	X X	П				X	X	X	#	x	Ì	×	×		X		TRUTKEE HIVEN
	RECNOS CREEK MIRCH SIRCACE MATERS	PERENNIA! STREAM	X X		X	x	4		X		4	X		X	X		X		TROCKE F. REVS.H
ľ	MIRGR WET ARES	"PRINGS, CEEPS EMERGENT MARGHES	x x			ΤŶ	-		Ŕ		+	1x						x :	···
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634.00	LAME TARGE HYDROLOGIC UNIT	<u> </u>				•	•		_ :			:					- ;		
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	OAD CHEEK	PERENNIAL STREAM	XX		×		$\top$		x		+	<del> </del> x		<del>î</del>	Ť		x		TROUT CREEK
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634.1D	SOUTH TARGE MA (continued)			П		Ħ		_		1	$\pm$	Ė	╛		Ť	t	Ť	+	
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	METRO LAKE	TAKE	XΧ	T	×		#	x	X	х	#	X	_	×-	X	1	x		UPPER TRUCKSE PIVER
l	HOME THOUSES KINNE	PERKINIAI STREAM	XX	╢	X		X		X		+	X	4	X	ť		X	H.	E HO CAREKATA TRUKKES BITATE
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	TAYLOS CIGLIK MEADOW MARSH		XX		X		7		X		Ţ	Ġ		X.	×	×		X 2	
	TAILAS CRUIK ANTADE LABE	LAKE	XX	1.1	х		x	×	X	X	+	X	. 1	x	×	+	X	+	ASCADE CAREE
	ASTADE CREEK		ХX		×			×	×		1	X		x	L		X		LAKE TAHOF
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			XX		X		Ŧ		Ÿ		Ŧ	X		X	£	1	X		DARE DATION
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	MATH JR CHEEK		x x	Н	X		1		×		+	X		x	F	╀	X	1	TARE TARGE
	CAMMILIAN CRELK		x x		x		+		x		+	x		<del>\$</del>	t	t	x	+	DAKE TAMOE
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	MINOR SURFACE WATERS		ХX	Н		닋	+	l.	×	¥	╀	<del> </del> x	4	×	╀	╀	×	+	LAKE TA GE
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	SPECIFIC VARIAGE CANYON CREEK WEST FORK CARSON REVER		XX		X X		¥ 3		Ŧ		+	ž		<del>* -</del>	×		x		CARSON SINK
	ALAMORI, DITTOH AND WACE VALUEYS ASSOCIATION	WETTERSONS THE MEADOWS	хх	П	х	П	#	×	¥	$\top$	1	X		X.	×	L		x ,	INDIAN CREEK/WE CARSON R
	MINOS SIGNACE WATERS MINOS WETLENDE		X X		X	×	+	x	Ž		+	X		X	+		X	X )	
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672.00	MAST FORK CARGON RIVER HYDROLOGIC UNIT	als Landella III a	:	İ		I	1	:	ı	:				;		:	I	i	$\{1,1,2,1,3,4,1,4,1,4,1,4,1,4,1,4,1,4,1,4,1,4,1$
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l i	WYTERNOS, PONDO W. OF MONOTON LARS 2 HWY 99	VERNAL POND	хх		х	П	士	x	x	x	Þ	х	⊐	x				X I	SAST FORE ARROW RIVER
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	PLEATIN CHEEK		хх		х		1		X		1	Х		X	Γ				SAST FORK CASUKN SOVER

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

AVILLA 1-112- C58 E MORT	HYDROLOGIC UNIT/SUBUNIT		l		BENE	FICIA	L US	ES				
2008 2015 2016 2016 2016 2016	DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	Ь	П	111			 П			Т	RECEIVING WATER
AVILLA 1-112- C58 E MORT			<b>2</b> 4 8 8	g 2		COME SOUR	305	3 8	101	8 6	<b>2</b> 3	
NOR!	# CRELL # CYSEK MEADOWS WETLANDS	- ESENTIAL STREAM SPICANOS/WEL MEA(XW, FLXX) PLA IN	x x	X	X	X X	X X	Ţ	X X	X	<u> </u>	MAUT FORM CARBON RIVER EAST FORK CARBON RIVER
MORT	JER KIND CREEK	FPHEMESAL STHEAM	хx	× 1	T x	x x	x	×	x	×		EAST FORK LARSON KLIER
	R(TN VALUEY BETHAKOS MITCA CREEK	WET MEADOW, PLOUDFLACK PERENNIAL STRLAM	XXX	X		X X	X	x	X	X		BAST FORK CAPSON RIVER BAST FORK CAPSON RIVER
	ABENT VALLEY OFFER ADDRY VALLEY WITHARDS	PORENICAL NURSEM WPOLANDS	x x	x	x	x x	X	x		х		MARK.PRVILLE CHELK
MILA	ненна сивек	KPHEMBRAL STREAM	x x	X		x x	X	X	+		X X	MANUELEVILLE CRIDIX
	IKLESTILLE CHESTA FLATHAN CHESTA (ABLOS LEVILATEAN MINE)	PERENDIAL STRUM PERENDIAL STRUM	x x	X		XX	X	x		x x	7	PRYANT CREEK
1.777	FLATHAN CHEEK (BELOW LEVIATIAN MINT)	PEPENBLA: FERNA	x x		x	x	¥	×		Ш	#	BRYANT CREEK
HS- FF	'EN CREE! 'ANT CREEK (HELWELDV ATHAN THE-K)	PERENDIAL STREAM	x x	x	х		X	x			+	EAST FORK CARSON RIVER EAST FORK CARSON RIVER
	ION SURFACE WATERS  OF WETLANDS	SPRINGS/JOEPS DMERGENT/MARCHES		XX		X X	X	x	x	x	¥ ¥	
			1-1-1	1-1-1	1 1~1	~; ~	1 121	11			^ ^	
002120 -He	MIAN CREEK MYDROLOGIC AREA OVERS LAKE	CAKE	XX	X	X	x x	×	x	-	X		INDIAN CHEEK
	JAN CHER JAN CHER HENNEDUS	PERFECTAL STEEAM RESPROTE	x x	X X		x x	×	- X				EAST FORK TARGER RETER EAST FORK TARGER RETER
WE'TE	LANIS MEAKSWOF NA SESEMIT LARF	WETCANDS/WET MEADOW	x x	×	T x	x x	⊢ â	x	x		хx	SAST FORK CARSUS RIVER
	S R. JUNT HI AND WATERS THE JUNE WATERS	WETT ANTIS /WITT MEADOW	x x	X X	X	XX	×	×	X		X X	INDIAN CREEK WO CARRON S.
VIN:	DR WPTIANTS	SPRINGF/GFEPS/EMBRGENT/MARGIGE		хx		xx	x	X	x		ХX	
631.00 WEST	T NALKER RIVER HYDROLOGIC UNIT	61 4 7 1.1 3 1 E	:   :	: 1	: :	į į	1 !	:	ı	ı	1	I : I : I : I
_	TLOPE VALLEY HYDROLOGIC AREA											
W.	FORK WALKER R. WILNER (ABOVE FORAZ LA MEADOW)	EDUCATE A DEDE	x x						_	×	хx	
	HIGOET CHEEK TIOPE VALLEY HA (continued)	FPHEMERAL STREAM	X X	X		XX	X		+	+-	+-	WEST WALKER SIVES
41:1	I CREE T WALKER HIVER (SELON WALFLE)	PERCENCIAL STRUM PERCENCIAL STRUM	XXX	x		x x	x	X	x	x	+	WEST WALKER RIVER WEST WALKER RIVER
LOST	T CARRON CRESS	PERENDIAL STREAM	x	x	1 x	x x	Ľ	. х	. х	×	$\pm$	MAN TILE
	MA TARK KA SURFACE WATERS	RESERVO I R	X X	X X		x x	X	X	x		$\neg$	TOPAZ LAKF
		GINTING (SEEPS/EMPHRENT/MARKEPS		хх		хх	I	×	х			
631.20 SLIE	NEARD CREEK HYDROLOGIC AREA			1 7	1 :	: :	. 1		!			: 1 1 1 1 1 1 1
	NEARD CHEEK OR STREATE WATERS	PERFMNIAI STREAF	x x	X	X	x x	X	X	X		$\mp$	WEST WALKER RIVER
	WELLANDS	SPRINGS (BEZIM (ZMERGENT) MARKHER	XX	X	×		X	x	X		ХX	
631.30 DEST	ERT CRIEK HYDROLOGIC AREA	4 1 1 1 1 1 1 1	1	! .	1 :	( )	.	!	:		ı	· : [ · [ ] : :
	ERT DREAK LEG, LAKE	PERENNIAL STREAM	XX	X	X	x x	X	X	ΥY	X	7	
MIEK	X P NI KPA IF MATERS		x x	x	×	x x	L x	×	×	×	$\pm$	
мтю	CR WETLANTS	SPRINGS/SEEPS EXPROENT MARSHOS	x x	X	X	хx	X	х	х	[X]	x x	
	EN MEST MALKER RIVER EYDROLOGIC AREA I WATERH ELVER (AROVE WALKEP)	CORPORATION OF THE STATE OF THE	XX	x x	Z Z	x x	İΥ	X		x x	1	MALKEP LAKE
\$113	VEX CHEPK	PERENNIAL STREAM	x x	×	×	хх	×	×		x	#	WEST WALKER RIVER
	CARREN ES HOT SPRINGS	PERENNIAL STREAM SPRINGS	XX	X		x x	XX	_ [ x	- 1 1	1		LITCUF WALKER RIVER
1 177		P-PKNNI AL LVSS	- 3		1 1 1		IXI	Τ×	П	$\dashv$	+	HOT CREEK
			x x	x x	x x	x x	X	×		хх	¥ v	
6502 P105		WEST ANDS	XX	X X	X	x x	X X	X X			x x	NOT CEREN WELT WALLEY PIVEN
0902 P108 0540	VIPT MEADURE WEBSIGS		x	x x	x x	x x	X X X	×	×			NOT CEREN WELT WALLEY PIVEN
08.02 P108 0.549 M10	VIPT MEARWAR WETLANDS P SLEPACE WATERS	MEST ANDO	XXX	X X	x x x x x x	x x x x x x x x x x x x x	X X X	x x x		x	хx	NOT CREEK WELT WALKER PLYCH
PECH PECH (ESAV Mile) MIRO	VIPT MEARWAR WEBLACES P SURFACE MATERS	HOT LANDO NET LANDA JPR I NOR - SELLER PLEME HOUNT, MAN "HEN.	x x x x x x	X X	x x x x x x	x x x x x x x x x x x x x	x x x	x x x x	x	x	x x	NOT CREEK WELT WALKER PLYCH
05.27 P1CN ESAV M100 M100	WIT MALKER RIVER HYDROLOGIC UNIT	HET LANDS HET LANDS FREI INGE - SELLERVENGENGENTV MANCHES	x x x x x x	X X	x x x x x x	x x x x x x x x x x x x x	x x x	x x x x	x	x	x x	NOT CREEK WELT WALKER PLYCH
630.00 <b>EAST</b>	VITT MARTHAM WYTHACK  P SHAPPAPE MATERII  T MARKER SIVER HYDROLOGIC UNIT  CONT. EYDROLOGIC ANNA  T MARKER HIUSE   HISCHA RA IXESSET PREFERVOIR)	HET LANDS HET LANDS FREI INGE - SELLERVENGENGENTV MANCHES	X X X X X X X X X X X X X X X X X X X	x x x x x x	x x x	x x x x x x x x x x x x x x x x x x x	X X X X X X	X X X	x	x	x x	NOT CREEK WELT WALKER PLYCH
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TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

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	CRYSTAL LAKE	ARA	<del> </del>	+	+	+	1	+		×		+	x	┢	X	$^{+}$	十	X	H	TRIBUTARY TO MILL CREEK
	CNETTW LAKE	TAKE	X		Ŧ		⇉	工		х		Ţ	X		×	7	Ŧ	x	$\Box$	TRUBUTARY BY MITH THEFA
	LEE VINING CREEK (ABOVE DEVERSION) LEE VINING CREEK (BELOW DEVERSION)	PERTUKTAL STREAM ZEHEMERAL STREAM	X	×	┿	X			X X			+	X	⊢	x	+	┿	×	₩	MONT LAKE/ IA AQUEDICT
	ADSTANAG LAKE	LAKE	ж	#	Τ				ХX	x	х	I	x		Х	t	土	x		TREBUTARY W. SEE VENIOR CHEEK
	PTOCAL LARF BLIERY LARF	'ARE Last	X	+	╀	+		X X	X			4	X	Н	X	+	+	X	$\perp$	TRIBUTARY A LEE V NING CHEEK
	KUENRY LAKE	TAKE	<del> </del>	✝	+	Ħ		- 1	ХX	×	x	+	x	-	<del>\$</del>	Ŧ	+	x	+	PRIBUTARY OF DEE VINING CREEK INTERFACE TO DEE VINING CREEK
	GIRBS LAKE	EPREMERAL LAKE	X	#	工	П	コ	7.	ХX			Ţ	×		I	1	I	x		TRIBITARS TO SEE VINIES CREEK
	MALESE CALLE TINCLUDE WALRER LAKE) PARESE CHEEK	PERENDIAL STREAM PERENDIAL STREAM	x		╀	x		+		X		╁	X		X	+	┿	X		TRIBUTARY TO OWENS
	NUMBER METHANIS MARKETS	WEST AND IS:	П	$\perp$	T	П		#	×	X		#	Ť.	х	×		土	x	Х	VIA AQUED IT
	MARI CHOM	SALINE DAKE	X		₽×	4	$\dashv$	×I-		X	X	×-	╁		X	X 2	4	×	+	ENTERNALLY CHAINED ARE
	MINOR SUPFACE WATERS WINNER SUPFACE WATERS		x		士		x	土		x		†	Ť		ΧÌ	t	士	×	Ť	<del>-</del>
	HINCH WETLANDS	SPRINGS SEEPS EMERGENT MARSHES	X	х	L	х	x	ユ	x	X	X	$\perp$	X		×	1	L	X	X :	d
602.00	ADOBE STOROLOGIC UNIT	with 1 1 1 1 1 1 1 1 1 1	i	:	ı	Τ			!	. ;					1			1	H	3 1 1 2 1 1 2 Z
	ATV HE ICHII SP	DEBENDIAL STREAM	X		I	X	コ	工		Х		Į				I	I	$\Box$		ADORE VALUES GROONIWA, ER
	NORTH CANYON - SEEK ADTHE RESSEVOIS	PERENDIAL STREAM INTERMITTENT LAKE	x		+	X	$\dashv$	+		X		+	X		X	+	+	Н	+	TRIBUTARY TO ATORE CAFEE INTERNALLY DRAINED SAFE
	13 FER SERING CARE	INTERMITTENT LAKE	X	x	士	×	⇉	土	×	IX	х	1	x		×	#	$\pm$	Ħ	$\pm$	INTERNALLY DRAINED CAIL
	MACK LAFE	INTSAMETTEMI LAKA		X	F	X	X	Ŧ		X		Ŧ	x		X	1	Ŧ	П	Į.	INTERNALLY DRAINED ARE
	MINOR STREACE WATERS MINOR STREACE WATERS			X	$\pm$	x		$\pm$		X		+	×		X	+	+	Н	+	<del> </del>
	MIDIR WHILAR S	JERINGS/JACOPS IMERGENT MARSHES	х		I	x		エ		х		1	х		х	1	工	L	X	(J
602 10	DENTER GREEK HYDROLOGIC AREA	Bales and the first						,												
	MINOR SURFACE MATERS		х		Τ	х		I			х	I	x		Х	I	I	Г		
	MINOR METCARDY	APRINGS/APERS PMEAGENT MARGHES	х	X	Щ	х	ΧÌ	工	ΙX	X	X		X		X	L	Щ	Ц	X	(
602.20	HIMTOON CREEK HYDROLOGIC AREA	Fila Ivi I I i v	I	i		!		:							!	i		ı	- 1	$\mathbf{L}: \mathbf{L}: \mathbf{L} \to \mathbf{L}$
	MINOR TURFACT WATERS		X		F	×		平		×		Ţ	X	П	×	Ţ	F	П	1	
'	MINOR WETLANDS	SPRINGS, SEPPS EMERGENT MARGHES	x	X.	_	X	<u>~1</u>	_	X	x	х	_	x	ш	X	_	_	ш	X	<u> </u>
603.00	DMENS NYUROLOGIC UNIT		i			٠.			- !		١,				:	П		- 1	- ;	
	LONG KYDROLOGIC AREA																		:	
603.10	ARE CROWLEY	HE-SENIZO I N	x	x	Τ	T	Т	x x	c x	x	х	T	x		X	T	T	х	Т	OWENE RIVER
	MINTERED CREEK	PERENNIAL STREAM	X		Ŧ	X		Ŧ	×	X	×	Ŧ	X		×	Ŧ		X	$\mp$	OWENS RIVER
	OWENC RIVER DEA MAN CHEEK	PERCENTAL STYLES PERCENTAL STYLESM	X		╁		X .	┿		X		╁	x	Н	X	+	┿	X	+	CROWLEY CARF
	STALS CREEK	PESEMBLAC STREAM	X		1		х	#	х			7	х		囯	Ţ	I	х	#	DEADMAN CRITEK
	DRY CREEK MARROTH CREEK	PERCHNIAL IN HEPCH ROACHES PERCHNIAL STREAM	X	╬	╀	×	X	+		X		+	X	Н	X	+,	, x	X	+	WENT HIVER
	TWIN LARGE	LAKE	x	Ť	士	Î	$\Box$	x	X	X	X	1	х		X	Í	Î	х	#	MAMMOSH CREEK
	AKS MAMIE	LAKE.	X	Ţ	Ŧ	H		X		X		+	X		<del>*</del>	4	+	X	4	MAMMOTH CRITER
	AEE MARY COLD WATER CREEK	LAKE PEREKNUAL STRUM	<del>^</del>	1	╈	++	+	┿		x		t	x		<del>x</del>	+	十	x	+	SAMMETH THEEK LAKE MARY
	ARROWILLED LASE	LAKE	X.		I	П		<b>=</b>		国		Ŧ	X		I	Ţ	I	X	7	MAMMOTH CREEK
	THELIPON CARE	LASE LASE	x	+	╀	+		X		¥		╁	X		x	+	╀	X	+	MAMMOTH TRIEK
	SED TAKE	LAKP	X	ᆂ	土	廿		x	×	X	x	1	x		X	1	土	x	_	PAMMENTH PESK
	LART GEOWIE	LAKE	X	╬	l x	<del>IJ</del>	4	×		틧	X .	+	X		X	١,	╁	X	+	MAMMY'T I CREEK
	NOT CREEN EX RESSECT LAXE	PERENNIAL STEFAM	X	+	┿	⇈	+	十		숲		ᠲ	Ť		x	ť	╁	Ŷ	+	OWENE ROWER MANNOTH TRUSE
	MOCTORD TALLE	(AAF	x	T	T	П	コ	Ŧ		×		I	x		x	I	Τ	х	7	NUMBER OF SE
	SHERWIN CHEEK ZHERWIN LANGS	PERCHNIAG STREAM DAKE	X	+	╀	×	+	+		¥		+	X		X	+	┿	X	+	SARROT L CRESK
	LAST LAKS	LAKE	х	1	土	П	コ	士	X	×	X	#	x		X	1	土	X	1	SHERWIN CREEK
	VALINTING LAXP	DEVENUENT, STAFAM	X	4	+	#	4	4	x	X		+	X		x	+	+	X	4	PARMALA TREEK
	LAURHU CREEK COMMICT CREEK	PERENNIAC UTKEAM PERENNIAC STELAM	Ŕ	x	T	x		士	X	X	×	士	X		Ī	士	t	x		CROMES LAKE
	SWAR LOAFE	LANE	X	Т	F	口	7		Х	×	X	Ţ	х		¥	Ţ	F	х	7	CONVECT THESE.
	MOUSES, CRAPER BOLLTON, CRAPER	PERENNIA', STRUAM PERENNIA', STRUAM	x		╁	X		+		X		+	X		X X	+	+	X	+	CROMILEY SAKE
	ICLITON LANGS	LAKER	x	#	T	ヸ		×		×		Ţ	x		×	Ţ	T	х	コ	HIC FOR CREUK
603.10	LORG EVUROLOGIC AREA (continued) MINOR S STAFF WATERS		x	x l	+	×	ᆉ	+	╁	x	¥	+	×	Н	×	+	+	x	+	
	M. FOR MATTAGES	SPRINGS SEEPS EMURGENT/MARGPES	x		土	x		土	<u> x</u>	x	x	1	x		x	I	土		X :	d
403 221						_	_													
603.20	UPPER OWENS HYDROLOGIC AREA CAMEN HILER WEST ANDS	E. L. E. E. E. J. J. T. E. SHIPPER STREET	X	x	Ť	x	7	T	x	X	7	J,	x		Х	Ţ	x		X .	
	WEED KINES	ESENCITAL STREAM	x	Τ	Γ	11	хI	_ x	ίx	X	X	Τ	X		х	)	I	Х	I	EA DUP POWER PLANT &
	(SSE THE CHOOM BY LANSE) CASENT PLYSH	EDVENERAL STREAM	x	_	т	тт	χŢ	Tx	Т×	[x]	хI	Ţ	x	П	ХĪ	Ţı	т	x	$\neg$	A DMS POWER PLANT V
	(BEDOW FIRST P.H.)				<b>二</b>							_								PLEASANT VALLEY METERWOIR
	WERE RIVER	PI KENNIAL RIVER	X	x]	Т.	Х	ХÌ	ХI	ΙX	[X]	х	1	Į X	L	×	)	IL.	ΙX		TINEMAIIA RESERVOLE
	(SELON PLEASANT VALLEY PENERGY R) MOCH CREEK	PERFORIAL STREAM	x		x	x s		Ţ	ĸΧ			I	x		x	I	Γ	х	I	<u> </u>
	HOUSE REAR MECHANISM & DOTINDARY ROAD	REPARTAN/FLCODULATE EMPROENT	X		F	X		4		X		Ŧ	x		×	Ŧ	+	X		SOCK CHESK
	AGK CREEK LAKE FASTEIN SHOCK LAKES	LAKE	X	+	$\pm$	Ħ	7	+	×	x	X	†	X		X	+	$\pm$	X		BOOK CHECK
	PONE CHEEK	PEP-RELA' STREAM	X	x	X	×	I	1	ĸΧ	X	х	1	X		x	Ţ	F	х	$\Box$	PLEASANT VALLEY RESERVOOR
	RING LART	DAKE DAKE	X	+	+	┿	$\dashv$	+		X		+	x		x	+	+	×		PINE CHEFK PINE HEER
	INGN TANGGOD TWAFF	, ak-	x	#	$^{\pm}$	口	ユ	丰	×	X	X	#	x	L	х	#	T	Π	#	PINE CREEK
	TABLE MARKS	'Asil	X	+	+	╁╂	4	x		x		+	X		X	+	+	Н	+	SABLE TRESS SWEWS ROSER
	MIBASANT VALLEY RESERVE R MACTER CREEK	RESERVOTA PERRINTAL TRESK	х			х		士	Τ×	x	х	$\pm$	X	L	×	士	1	х	廿	OMOUS RIVER
	FORTON CREEK MEDIANDS 4 18 1992 3-51	WET MEALOW EMERGENT	х	X		X	X	丰	X	x	X	Ŧ	х		X	Ţ	Ŧ	X	X :	CHORIUN KSSK
	FORTON CREEK WETLANDS 5	METLAKUS MET MENIXAF	X		+	X		十		X		+	x		x	+	+			C HORTON GREEK C OWICKS AINTOR
	SWOCKMAN RD WEST AND HIMN 195 AND JURSON CREEK	ALPARIAN EMERGENT KARSH			+	x		+		x		+	x		x	#	士	X	X :	HOPTON CREEK
		RUPARCAN EMERGEONT MARSH	X																	
	PARMILL : HIMASSA # BINY 395 PINY CREEK RETLANDS # N. KOURD VALUES ROAD	RIPAKIAN SMENGERI	x	X	Ŧ	х	X	#	X	x		Ŧ	X		X	+	Ŧ			PINE CREEK
	FAMMILL OH MASSEL # 1967 395			x	F		X	Ŧ	x		X	-	X X	Ĺ	X X X	+	Ŧ	X	X :	C PINE CREEK ROCK CPFE/

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY	Γ					1	315	VE:	ric	IA	L	USI	E8						٦	
	DRAINAGE FEATURE	CLASS MODIFIER	וָּן	4	OK A		i i			7	į	á	ı	9	.] 9	l e	2	8	ı			RECEIVING WATER
HU No.	OMENS RIVER NATERSHED	- tree faints come	B	3		ı	12		Ž.	扎	8	å	لقا	Ü	Ш	Ĭ	3	ĕ	ā	ĝ,	J	· · · · · · · · · · · · · · · · · · ·
	SAMMILL FOND	POND	Īχ	x	1	Ι×	T		Ť	x	хIх	T	ХĪ	x	Ť	1	T	Г	Ī	Ĩ	Т	HURTON CREEK
I	MOGEE CREEK	PERENNIAL CREEK	X	х	#	x	х	口	X	X.	ХX			X	12	ιx			x	ユ	1	BISHOP CREEK & HURTON CHEEF
	OWERS RIVER CARS: 1:DE SLOKER WETLANDS	EART ANDS	X		+	X		Н		×	X X		×	X	43	×	Ļ	Ι.	Ų	↲	↲	TWENS KIJEK
	719k GLOUGH(INYO MONO CO 1 INE)	and that	×		士		x	▤		x			X			Ī						OMENS RIJER
603.20	UPPER ONENS HA (continued)		Н	Н		1	L	Н	4	7	+	₽.	Н	4	+	₽	Ļ	Н	4	4	4	
	ONERS RIVER WATERSHED (continued) FISH GLOUGH (AT PH THVERSION)	SLO,UTH	x	¥	+	x	┢	H	7	x i	×	H	<del> </del>	x	╁,	l x	×	Н	7	×	┥	ONFAS R ZEF
	METLAND NEAR FLEATANT VALLEY CAPPOROUND	BELL TUAL, WETLEN	x		#	х		П		X.			×		ŀ	×		П		x	x	OWENS RIVER
1	PERIODORP SOMERY CAMADA	SLOVAH EPHEMERAL CAKAI	X		+	X		Н			X X		×	<del>X</del>	╬	×	x	Н	×	+		OMPNS AINSEA
	WETLAND BETWEEN MONELLY CAMPLS	WETLANDS	х	х		x		ธ	╛	X :	ХX		x	⇉	7	1	L			x	×	WERN BONS
	WETLAN - RETWEEN SCHALLY : ANA S PERER MCNALLY CAKAL WETLANDS	WET LANDS WITH JANUAR	X			X		Н			X X		¥	+	- 13		⊦	Н	-	<del>X</del>	¥	OWENS BIVES OWENS BIVES
	RTOHOP CRICIC CANAL	PERFORMAL CANAL	х	х	Ť	X	Г	Ħ	T	x :	X			x	Ė		t	H	1	Î		OWENS PINER
	RAWGON CANAL	EPHEMERAL CANAS PERENNIAL CANAS	X		4	X		Ц	4	X :	X X	Н		ž.	ŀ		F	Т	4	7		WENT RIVER
	COLL INC. CANAL BUCKLEY PONDS	PONTOS	x		+	x		Н	+	x :	x x	H		X	- 17		┝	Н	+	╅		OWENS PICER
	HISTOU CREEK (ABOVE IMPANES)	PERESINTAL STREAM	×	х	7	Ţ			x	x :	ХX			x	1	I			¥	#	↴	INTAKE 2 RESERVO'R
	INCAKE 2 RESERVOLE BISHOP CKSSK (BELOW INCAKS ZI	RESERVOIR EPHEMERAL FIREAR	X	Н	+	╁	H				K X			X	+×		-	Н	x	+		SOUTHERN CALLFORNIA ROLFON NYMER PLANT
	HOSHOP CREEK (RETSW [AST P R )	PERFINIAL STREAM	×	x	x	x		⇉	1	X :	ĸΧ		П	x	Ţ×				X	I		WENS RIVER
	WALL SIDE RESERVOIR NORTH LAKE	REFLEXACTE RESERVACTE	X	Н	+	+	Н	Ų			K X			X	X		┝	Н	-	+		HISHOP CHEKK
	ARE SARRINA	MENERAL 'R	х	╛	士	1			x	x :	K X	П		x	×		L	Н	_	+		HISHCP THEEX HISHCP PERK
	SHALL BRICK	RESERVOIR	X	1	1	$\vdash$	F	×			x x		×	x	Ľ		F	П	7	7	I	RISHEP CREEK
	GREEN LAKE CREEK COVOTE CREEK	PERENNIAL STREAM PERENNIAL STREAM	X	x	+	t	Н	H			K X			x	-   ;		t	Н	┥	+		HIGHER CHEEK
	KENNUCH HOT SPNINGS	ФКІМ-6	х	X	$\top$	×		⇉	ℸ	x :	ĸΧ		х	x	1×		Г	口	⇉	#	ŀ	with the services
	NIG PINE CARAL RIG PINE CARAL	PARMERAY CANAL METLANDS, MAINTAINED FREIG CANAL	X		+	x	×	H		X Z	K X		x	×	X		1	Н	4	¥Ì.		DWENS SIVES DWENS NIVES
	RAN-A CREEK ACC LEAT LAND.	PERRONIAL CREEK	х	X	٦,	X		⇉		X :	K X			x	Ţ×	ī	L		x	Ť	ٔل	SIG PINE CANAL
	ATRODUCEROUS BEEK	PEREUNIAL CREEK	X		4		X	П			XX				X X		L		x	4	-	LAMMIN PARK
	AND MANAGES	PERENKIAL CREEK SEKINGS	<del> </del>		٦,	x	ř	$\forall$			χ̈́			X	+X	x	×		X	┿		C'NEMARA TREEK
	TINEMATA CREEK	PERSONNIA - CRESS	х	X	1	Х		$\Box$	1	X :	κx			х	1×	:[		П	х	1	1	FENERALIA RESISTENCIA
	TNEMARK HENERVOTH NEBRIG CREEK	SESETVOIR PERENRIAS IN GRIER REACH	×		+	×	Н	$\dashv$			K X			x	T <sub>x</sub>		×	Н	+	+		WESS RIVER SENTON VALLEY SROUNDWRITER
	CHALFANT VALLEY MATERSHED	And the same same		7.7	7.5	,, ·				. :	. v		` '	Ç Î	ii.		, III.,	_		7	7	(,,,)
	SARTLETT RAWTH SPHINGS	SPEINGS PERENTAL IN STUEN REACH	x		+	x		$\dashv$			K X			x	- X			Н	7	4		SENTOR VALLEY GRO INFWATSH SECTOR VALLEY GRO INFWATSH
	YONT YMERY CREEK UPPER CHEXS KA (continued)	PERENTAL IN STIEN REACH	1~1	^1		т.		_		<u>^1:</u>	.T÷	L	ш	^	^	1_	_	ш	_	_		APARTOL: NEI CITA. SHO INIMETER
	CHALFANT VALLEY WATERSHED (continued)				_			_	Ţ		-1		_		Τ.	_			Ξ,	Ţ	Ţ	
	MARRIE CREEK	PERFECULAL IN SUPPER REACH PERFECULAL STREAM	×			×		+			K X			×	╬		┝	┉	+	+	┥	AMIC VALUEY GREENWATER -AMIC VALUEY GREENWATER
	CALLEL CARYON CREEK	INTERNITOENT STREAM	x	х	$\pm$	x			I	x)	κx			х	]×			Ц	コ	I	,	AMI. VALLEY GROUN WATER
	SELECTION OF SELECTION	DOTERMITTENT STREAM DOTERMITTENT STREAM	X		+	×	Н	+			K X			x	X		⊢	Н	+	+		-AMIT: VALCEY GROUN WATER -AMIT: VALCEY GROUNWATER
	M. ODC F CANYON CREEK ALMON I DROKA	INTERMITTERS STREAM	x		$\pm$	x		┪	┑	x i	K X		П	Х	T ×		H	Н	_	$\pm$		BAMIC VALLEY GROUNDWATER
	MULTYN CARDE	4-APASTAL STREAM	X		7	X		$\Box$			×Χ			X.	4				×	4	4	AMIL VALUES GROUNOWATER
	COTTONNOOD CANYON CHESK COMS TORES CHEEK	PERENDAL STREAM PERENDAL STREAM	x		+	x	Н	H			K X			x	+2		┝		x	┿		SAMIL VALLEY DECONOMATES SAMIL VALLEY GROUNDWATER
	MUNCH STREAMS		x	x	$\bot$	x		$\Box$	T	x)	ĸ		П	x	Þ	I			$\Box$	1	$\Box$	
	YELLONDACKIT CANYON TREEK BERTON ETT SER 1925	INTERMITTENT DEREAM SUBINGS	X		+	X		-			x x		爿	X	<del>                                     </del>		⊦	Н	+	+		SAMIC, VALLEY URGUNEWATER SAMIC, VALLEY GROUNDWATCH
	ALTWEN LIBERS	SYPERMITTENT STREAM	x		$\pm$	x	Н	$\exists$			c x			X	Ť			Н	$\exists$	1		THALFART VALUE ON STANSTON
	T ARE TANAOR GREEK	PERENTAL IN TUPPER MIACH	X		1	X		4			K X		x	X.	Ļ		Ļ	Н	_	x	4	THAT.FART VALLEY OW
	WARM REPORTS WETTANDS/HOUSE S. O. RECEING THE	SPRINGS WETLANDS	×		╅	X		+		٠	K X		弁	4	╁	×	Ĥ	Н			x k	WIENE VALLEY ON
		SPR: NO	x	х	1	х	х		I	X 3	ĸ		X	1		Х	x			х	- (	WENE RIPATE
	METLANDS 181 CYN 8 DE SILVAR (PRYF METLANDS MEADOW (EFFL OF FUNE OREAK RO	WETLANDS' SPRINGS WET MEADON	X			x		+		X 3 X 3		Н	Н	x	- 1		H	╢				WERE VALLEY OF PLEASANT VALLEY PLETRADIR
	PINE CREEK AT BOYANA	WETLANDS, HIPAHIAN	х	х	士	X		╛	I	X :	ĸ	◩		x	7		E			X :	x]:	MENS B. / FLEAGANT VAL. RGS
		METILANDS:	×		Ŧ	X	П	Ц	7	X Z	<u> </u>	П		X	ľ		Г	П	$\perp$	X	×	STORGE CARRY
	DOTT H JOHNS MEADOWS WESTLANDS WHIT AND SZEDWER STATION 3 (KLEV. +500°)	WEI VEATKW BIPARIAN	X		┪	X	Н	+		* 1		Н		X X	ł		⊢	Н		X		erszer megsik
	WETLANDS LOWER BORCK TRACELIAWA (148, F 20 87001)	WETLANDS	x		T	х	П	$\Box$		X 3			П	Ţ	×			П		X :		
	WETLANDS LOWER MC TEE THESELECT 5700") 5-HARP'S MEA YOUTHERE MAGES CRECKE WETLANDS	REPARTAN, WEST AND SETTANDS: SPRINGS	X		╬	X	Н	$\dashv$		X			X	× l	╬		$\vdash$	Н	+	÷	۲İ.	BITWOS CREEK BOOKE CREEK B.SHOOK CHEEK
	WELLS UPDER MEADOW WITHARDS	MET AESOMA METTANGS	x	х	$\pm$	х			I	x :	ĸ	Ħ			×	:	Г	口		X :	×	
	RITTERMILL CANYONILLES 7+00-1 CPPSR	WETCANDS	X		+	x	Н	Н		X		╢	_	x	₩.	_	H	Н	_	X Z	-	PRESUIT VALSES SEE
	PEPER BIRCH CREEK  VIJULE FORK BINESS CREEK(GLEV.9000 F WESLANDS	WET MEACON, HIPARIAN	x		t	х		Ħ	I	x :	κ .	H		х	×	:		H		X	X	RISHOP CREEK
	SOUTH FORK RISHOP CREEK WETLANDS	WET MEADOW, RUPARCAN	Ÿ		1	Š		7		Х	τ.	П	_	x	Ę		Г	П	$\Box$	X :	X I	TESIKOP CREWK
	WARREN DRY LAKE METLAMIN METLANDS HALF Km - NW DF MARKEN LAKE	WETLANDS WETLANDS, WET MENICH	x		+	X		$\forall$		X 2		Н	×	$^{+}$	X		H	Н				SWENN AND LEY SAF
	WETT AN' SCHALF KM WEST OF WARREN LAKE	WET'ANDS, WET HEADOW	x	x	#	х		ヸ	T	x z	K .	П	ヸ	ļ	I×		Г	口		x :	X	WENE VALLEY GW
	WET AND WELL HORTH OF KLOND-LEE LAKE	WFT:ANDS, WET MEADOW	×	×	+	×	x	$\dashv$	+	×	4	╢	H	+	+*	×	H	Н	+	× P	*	WENG RIVER
	UPPER OWENS KA (continued) CEALFANT VALLEY WATERSHED (continued)		⇈	ℸ	士	t	d	⇉	1	士	Ι	Ħ	⇉	土	#	t		H	コ	1	1	
	WETLANDS CHANNEL N OF KLONDIKE LARE	WETLANDS, RIPARIAN	X		Ŧ	×		Ŧ	4	X	K		X	Ŧ		X		Н	$\dashv$	X)	¥	WENE LAFE
		WETCANDS, RIPARIAN WETCAN 5	x	х	$\pm$		X	∄	I	x):	ĸ	H	Ħ	1	Ţ	L		H		X.	x ŀ	OWENEY RESERVE
	WETT ANDSZE SIDE OF OWEND VALLEY	METCANC 9	X		Ŧ	×		4		X :	K X	П	П	Ţ	1		F	П	_	X 2	X :	WINS RUER
	RAKER CROEK, ABOVE BIG PING	WETLANDS FT*ING	x		+	x		H			K X	Н		×	1	×	┢	Н	_	+	<del>^</del>	WENT RIVER WENE VALUE OF CRESWATER
	MINOR PRINCE WATERS		×	x	<b>1</b> ×	X		_	$\Box$	X]:	K X		⇉		7	$oxed{\mathbb{L}}$	×	П		X.		
	Y DECH LIGHT AND R	SPRINGS SPEES SEMERGENT/MARSHED	x	x	_1_	1×	х	Ц	_[	x   3	x x	Ш	x	X	X	1_	<u> </u>	Ш		x]:	X	
603.30	LOWER OWERS HYDROLOGIC AREA	$(4\cdot 3\cdot 4)^{\circ} + 3\cdot 4\cdot 4\cdot 5\cdot 1$				H		- (		Ļ	Ļ				Ų	Į.			I,	ij		LETERAL DES
	OWERS RIVE ( WETTAMOR		х		Ŧ	X	Р	J			K		X		- 12		F	×		X :		
	OMERS LAKE METLANDS Webs SIVER ( RELOW TINEMARK SESFOW (K)	WETLANDS CONTROLLED KIJEK	×		+	×		+			K X		Ť		+*		×	Н	x	1	Ī	HACWEE HER COATLA NO DOME
	CACING RIVER THRICK IMPART DAME	EFERMERA', STREAM	x	x	1	х	х	$\Box$	1	x :	K X		x		T ×	x			x	Ţ	Ŀ	WALES LARG
	WENTANDS ASSAULT FLAT CAST OF ORGENS HIVER, COLOMITE	WETLANDS WETLANDS	X		+		X	$\dashv$		<u> </u>	ĸ .	Н	₩	+	- 12		╁	╟┤				TA " WG INDIGHT
	WETT ANDS KOLMITTE  1788-H 1989-S BIVER CHANNEL WETTAND	ART'LAKES	х	×	士	x		╛	1	x :	ĸ		x	⇉	T×	×	x	H		x	×	A AGUEDICT
	CAMOUNE CREEK	PERSONALA STAFAM	X		Ŧ	x		Į	Į	ΧĪ	K X	IJ	H	X X	- 7×		F		x	4		.A. AQUED KT
	GONNALS REAK DIVISION CRESK	PERSON (AL STREAM PERSON) AT STREAM	X			X		_+			XX			X	12		t		Ŷ	+		L.A. AQUEPKT
	SAMP   RELX	PERRINTAL STREAM	х	x	$\perp$	X		コ	_	X :	ĸХ		П	х	7	ī	Г		x		1	A AQUENICI
1	"HIBAUT CREEK	PERSON LATER STREAM	[X]	×		X	ட	ப		A   2	×Χ	ш	Ц	X	×	<u>.                                    </u>	_	ш	X	_	-1	L.A. AQUESTO

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY						В	EN	ΕF	ıc	IA	L	ŲBI	ES		_					RECEIVING
HU No.	DRAINAGE FEATURE	CLASS MODIFIER	ğ	Ę	ğ	2 5	1	À	8		į	ATT O	200	ą		į	A TOTAL	ā	E	Į.	,	WATER
	OAK CREEK CAMPGROUND WETLANDS	#ETLANDS	x	x		K X			1	X	1	Γ		x	٦.	k						PAK CREEK
	MK "RPEX	PENEMBER STREAM			1	X X		П		x z	X		X	х	Ţ	ĸΓ	¥		Х		4	A AUREDICT
	NAME FORK OAK CREEK SOUTH FORK OAK CREEK	PERENTAL STREAM PERLICUAL STREAM	X	<del>X</del>	+	2		Н			X			×		4	1		x	7		OWK CHEEK
	INDEFENDENCE CREEK	PERCENTAL STREAM	<del>  î  </del>		+	+		Н			r			x	+;	-	╆╼		x	+		A ACUMPUTC
	PTNYCH CREEK	PERENTUAL STREAM	x	x	1						x			x	1	4.	П		x	+		KIS POLINDETENDENCE
	SAMES CREEK	PERENRIAL STREAM	X		4	¥		Ц			x			X	12		П	П	¥	$\perp$	1	A AQUELYLIT
	PRING N OF BLESHERD CADES  PER-SRO CREEK	PEREMITA' STREAM	X		+	- X		H			X		Н	x	+ 13	X	X	Н	x	+		A. AQUERUCT
	RATER CREAK	PERENNIAL STREAM	x		+	×		H			x			x	+;		Н		솼	┿		A ADMENIOS A ADMEDICS
	OFFICEUR CHEEF	PERSONALAL STREAM	×		1	×			Ë	x >	X			х		₫.			x	$\perp$		A AULETUT
	HOORNOL CREEK	PERSONALAL STREAM	x	X	+	. X		Н			×	Н	Н	х		X	х	Н	X		4	.A. AQUEDICT
603.30	WETLANDS/EAST OF MOVIE FLAT LOWER OWENS HA (continued)	_	<del>l≏l</del>	Н	+	x x	Н	Н	ť	<u> </u>	+	Н	Н	╅	+	ᠲ	Н	┝╾┥	╅	<del>~ </del>	<del>* </del>	MERS VALLEY OW
	MATERIAL HERY 195	METLANCS	×	х	$\top$	×		Ħ	7	1			_	_	٦,	ďχ	Ħ	H	7	x z	×	.A. AGREDUT
	WITHOUT FAULT SCASE MODE MY MASTER CASE BY THE FAME	KETTANOT	х		4	X		П		( )			П	7	7		П	П	_	x :	X	MARS HIVER
	LOWER LONE PINE CREEK WETTANDS SPECKO OSSITE OF LONE PINE CREEK	WELLANDS SPRING	x		+	X		×		3		Н	¥	x	+;		Н	Н				MEDS RIVER /FNI 2 DEL CHEEK
	SEPT WEST OF HOSSENFOR MEALYW RYAD	WETLANDS	x		+	1x		Н	13	1 2		Н	7	+	+;		Н	Н				ANE FINE CRESS
	WRITEAN IS 10 FEASANT LITTER SAST OF OUTDIN HER RE-	sin, as	×			ХX				K X					Ŀ	X		□	Ί	X X	X I	FORK LUTKEN CREEK
	1. AN STRING	NIRLINGS	x		-1			$\Box$		4 3			×	4	1		T	П		x	4	JEKEN CREEK
	POST ON INCIAN SPRINGS SUAT		X		+	×		+		c x		Н	X	<u> </u>	+;		Н	Н		X		DIAZ LAKE
	DEEP NORTH OF MOVIE FLAT	SPRING	Î		_	X		╛		c x		H	╛	_	ť		Н	H	7	7	Т	WENS R. JI K
	WEDLANDS LOKE DINE BARROW CORDS HOAL	WETLANDS	¥		T	7	П	T	7	ŔΣ	Ι	口	П	I		×	х			x :		A AQUEUNCI
	DONE P BE CHESK	PERRINGAL SERVAN	X.		4	X		+			x	Н		x	3		H		X	+		A A305, 075
	TUTTLE CREEK DIAT CREEK		X		+	- X		+			×			<del>X</del>	1;		Н		x	+		TOUGHUGA A.
	DIAT LAKE	LAKE	x	X	J	X		x	-	KΧ	X		х	x	7	L	Ħ		х	_	ŀ	WERS VALLEY GROUNDWATER
	NORT : FORK LUGYIN CREE?	PEREMITAL STREAM		X	1	X	П	Ţ			X			X	7		П		X	Ţ	Ŀ	WERS VALLEY GROUNDWATER
	SOUTH, FORK LIGATE CREEY CARROLL CREEK	PERENKIAL STYGEN PERINKIAL STYGEN	X		+	X		+			X			x	- 13		Н		x	+		WERS VALUEY GROUNWATER WERS VALUEY GROUNWATER
	CONTONNOCO CREEK		x		+	T x		1:	X 3	ĸΧ	x			Ŷ	+;		Н		Ŷ	+		.A. AQUEDUCT
	COTTOPWOOD LAKES (N°. 2.2.1.4.*.n)	SAFE	х	П	1	X		_	_,	( X	X		$\Box$	x	1	ď	П		х	1	7	COLONADOS CREEK
	AGH CREEK		X		4	X		$\perp$			X			×.		×	Н		X	+		ATWEE RESERVOIR
	CARTAGO CREEK JUANCIIA CHILIS		x		+	X		+			X			x	1		Н		X	+	-	ALWEE RESERVOIN ALWES RESERVOIN
	PATWOR RESTRICTE WEST ARTS		x		+	†â		+		7		Н		x	15		H	H		x 3		ATAKS RESISEO.TH
	DATHER RESERVOOR	AESERATIA	×	x		ХX		$\Box$		d y	x			x	1		x		x	1		A. AÇKELKITT
	SISBIT CAPEK	PERENNIAL STREAM	x		4	X	Н	+			x			X	-12		Н		X	+		EXMERITA A.
	BOORACE PREEK WITCHNESS EAST OF SCEVENS TANAL		×		ť	XX	x	+		1		Н	Н	×	+ 13	x	×		×	<del>xl</del> ,		ATMEF RESIDENCE ALL ALL REPORTS
	WETCARDS FOR LINDS BY SING RD AT HWY 195		x		1	X	Х	$\pm$	7	1 2			╛	х	12	х	х	⇈		x x	K r	A ACHERICT
	-cirt the sendence indian besets, atton	AFTEANDS	×		7	X		$\perp$		( X		Ц	4	7		×		Ц	_	X X	4	AK CREEK/ LA AQUEFOCT
	ACTINOS/SPR E OF THARBEL IN, N OF HOLDSNOPPE	SERING SERING	Ϋ́		<del>,</del>	X X		+		1.		Н	-	+	냥	×	×	Н	+	×		A AQUEDO: MENS LAKE
	SPRINGS S OF LEELER CERGO CORDO APRINA-					z x		+		1		Н	┪	+	1;		Н	Н	$\boldsymbol{+}$	╈		WENG LAKE
	77KLA DXLK2 EA SEMINO	SPRINGS	x	x	I	X	П	$\Box$	7	ī x				$\perp$	13				コ	_		AGRE LAKE
	Symple of the state of	SPR: MSS	x		+	X X		1		( x		Н	_	<u>.</u>	x 3		П		1	1	-	WERS LIKE
603 30	KCELSK BURINGS LOWER OWENS HA (continued)	SPR1NUS	<del>l*</del> ⊦	<del>^</del>	ť	*   *	<del>l</del> ↑	+	+	4×	Н	Н	×	× .	×	+	Н	×	+	+	ť	WENG LAKI
302.50	WENS TWEE		×		+	_	m	_			x				x 5	1	П		⇉	1	1	454.) CHMIARS, NICAMB IN
	MINDA SHAFACE WATERS		х		1	X X		4			X		×		ŀ		х	$\Box$	X	1	7	
	SIBOR WETLANDS	SPECINGS (SEEPS) EMERGENT MARGHES	х	х	_	Х	Х		,	(   2	X	Ш	X	х	1	1	ш	Ш		X X	4	
603.40	CENTERNIAL MYDROLOGIC AREA			·	i	:		:	:		l	:	T	H	:			:		i		:   :     .
	YINGA BURFACE WATERS		×		7		х	7			X			x			П	П	$\perp$	Т	Ţ	
	STROK WETLANDS	SERINGS/SEEPS EMERGENT/MARKES	x	x		X	X	ш	1,	(   X	X	Ш	x]	х	12	:1_	ш	Ш	_	X D	4	
604.00	FISE LASE HYDROLOGIC UNIT		·	J	. J			i.			ļ			j.	;			<u>.</u>	J			السلم فسأسلط أباني
	CAS N , SEEK		х.		I	_	П	$\Box$			I				Ţ		x		I	1		TSE LAKE VASSIFY SK
	CHPATUVICH CREEK		X		+	×		+			X			x	7		Н	Н	+	+		TSE LANE VALLEY ON
	INDIAN CRESK		<del>  î  </del>		+	+÷		+			x			x	+3		×	Н	+	╈	-	TEE LASE VALLEY SV
	PERRY ATREE CREEK	PERFORTAL STREAK	x	х	1	X	П	Ĭ	7	₹ŢX	¥			x	×	ı	╛	╛	⇉	1	ŀ	ISE LAFE VALLEY ON
	MCAFEE CREEK		x		1	K X		Ţ			X			X.	<del>Į</del>		Н	Н	7	1		THE LAKE VALLEY A
	TOURN MERK FRUIT CROPK	PERFORDAL SUREAM	X		+	X		+			x			X	- 1×		Н	H	+	+		TSH LAZE VALLEY OW TSH LAZE VALLEY OW
	MITTHURSE LIFERK	INTERMITTENT STEEAM	x	х	1	X		_	١,	ďχ	X		⊐	X	T ×	ı	D	ㅂ	$\pm$	1	Ī	TOTE LAKE VALLEY DW
	PUSSAL PLORRER		×	X	T	Ī		T			X			ĭ	X		П	Д	Ţ	T	ŀ	TYLLEXE VALLEY SA
	INDIAN SAKOEN CHIEK	INTERMITATEM STREAM	X		+	x		+	+;		X			X	X		Ļ	Н	+	+		THE LAXE VALLEY ON
	MINOR SURFACE WATERS		х	X	_	X	П	_	1	d x	x		⇉	x	1×	t		╛	$\pm$	+	1	service relabel 1 - 99
	MINON MECHANICS		х		1	X	х	ゴ									П			X )	ď	
	DUEF SPRINGS NYEROLOGIC UNIT WYMAN 9420K		ĭ		4	y	ď	4	7		х	П	χĺ	Ŧ	ĺχ	Г		4	7	۳	Ī,	SEP SPEINGS VAC. OW
	VARAN SERR	PERENNIAL ETREAN	X	ж	_	Ť		+	73	( x	x	П	x	_	Ţ×	ī	П			_	1	RIESTARY TO WYMAK REEK
	DEEL SPRINGS LAKE WESTANDS AND MARSH		X	Т	T	Ι	П	$\Box$	٠.			П		_ ;	x x	x	х			x >	4	
	DOBL SPRINGS NAKE		프		+		Н	+	42	Y X	x	Н	Χĺ	-12	×				+	7	+	SEP SPEINGS JAC GW
	MINCR SERALE WATERS MINCR WEST ARTS		x		+		x	+	+;	<del>X L</del>	x	Н	쐈	x	X		×		+	x z	ł	
				1		- 22						_		_		_	_				_	
	EURERA HYDROLOGIC UNIT	200 L L 3 L L 7 L 3		ı,	Ų	Ţ	Α,	Ţ	Ų	r		Ц	ц	Ą	ą.	F		Ļ	ų	П	f	
	MINOR SURPACE WATERS	TARRESTOR DESCRIPTION OF COMMO	X	X	+	1 <del>,</del>	H	+	+;	HX.	1×	Н	<del>X</del>	¥	+	+	Н	-	+	× 5	ł	
	MINGR WETTANDS	SPRINGS SEESS/SMERGENT/MARSHED	-1				- 141		_12	-14	_		-1		-10	_	_	_		-12	-1	
	MARBLE EATH HYDROLOGIC LAKEA				Ţ	Ŧ	ä	Ų	Ţ					Ų	Ţ	F				Ţ	Ţ	
	MIROR SURPACE WATERS		X	X	4	X	닖	4	12	X	П	Ц	Χĺ	Ţ	12	F	П	4	4		ļ	
	MINUR WETLANTE	SPRINGS SEEDS/EMERGENT/MARCHES	[*]	ΧÌ		Тx	1 X	_	13	· į X	ш	Ч	٨	×]	1 ×	1	Ц	_1	1	<u>د ا</u> ۷	1	
606.20	MARRILE CANYON HYDROLOGIC AREA	73				i							i		i							:
	MINUR SURFACE WATERS		X	x	Ţ	X	П	I	ļ	į x	П	П	×	Ţ	Į×	Г	П	ij	I	Τ	1	
	MINON WHILARDS	SPRINTS/SSRPS (AMERICAN MARCHES	Ι¥	X.	1	I	[x]	_L	1)	( X	Ш	Ц	Χĺ	X	Į X	1	Ц	1	:	X X	4	
607-6nl	SALINE SYDROLOGIC DNIT																					
_0.,00	MUNDA SURFACE WATERS		x			x	П		Ţ	( x	х		х	]:	ХX	Ī	П		T	Т	T	
	MINOR WITEARDS	SPRINGS PEEPLOFMERGESTAKARGRES	X	Ι	Ι	I	x	1	)	( x	х	Ц	Χĺ	x]	X	L	Ц	1	1	X X	ď	
607 10	SALT LARE HYDROLOGIC AREA			H															j			
	MINOR SURFA F WATERS		X	Ī	ľ	Ϊx		Ţ	Ţ	( X			x	ľ	ľ	Γ			J	Ţ	Ĵ	
		SPRINGS DEEPS/EMERGENT/KARSHES	х	T	T	X	Х	Ţ	)	( X			х	I	X				Ī	X 3	ď	
1					_				_	_	_	_	_	_	_	_	_				_	

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY		BENE	FICIAL U	SES	-	D. T. C. C. C. C. C. C. C. C. C. C. C. C. C.
HU No.	DRAINAGE FEATURE	CLASS MODIFIER	5 6 2	EMB PASE RAV POW RRC-1	2-3 200 200 200 200 200 200 200 200 200 20	2 8 8 <b>5</b>		RECEIVING WATER
	CAMBO HYDROLOGIC AREA	MARKET BELLE	12   2   2		MISISIS	13151515		
	MINOR SURFACE WATERS			x x				
	HINDR WETLANDS	SPRINGE/GEEPS EMERGENT/MARSHE	x[ ]	XX X	x x x	x	x   x	
608.00	MACE TRACK HYDROLOGIC UNIT	<del></del>	<u>i_</u> _i_		.	j	i	
	MINOR SURGACI, WATERS MIN R WELLANDS	SPRINGS/SEEPS (SEERGES) / MARCHES	X	X X X	X X X X	XXXX	X X X	
			1-1	12121 1 [2]	VITI INIV			·
608.10	TEARETTLE JUNCTION HYDROLOGIC AREA MINOR STEFACE WATERN		x	x x	x x	X		
	MUSOR WETCANDS	SPRINGS SECHS EMBRICANT MARSHES	x	x x x			x x	_
£08.30	HIDDEN VALLEY KYDROLOGIC AREA							_
008.20	MENOR SURFACE WATERS		х	x x	X X	X		
	KINOR WETLANDS	SPRINGS/SERVE FINESCENT/MARCHES	x	x x x	x x x	x	x x	
60B.3D	ULIDA HYEROLOGIC AREA		1 1 :	1.1 - 1	1	: : :	.	
	MINOS CORACE WAITHE		X	x x	x x			
	KINGE WESTANDS	SPATINGS SEEDS EMERGERT/MARGESS	x	x x x	xI	[ x ]		
608.40	SAND FLAT HYDROLOGIC AREA		<u>:                                    </u>	والمراجات			:	7 L : 1 L : 1 I
	MINOR SURFACE WATERS MINOR WETLANDS	OPRINGS/SEEPS FMERGENT/MARSHES	X	X X X	x x	X X	H <sub>x</sub>   <sub>x</sub>	
			1	12121 1.121				
609.00	AMARGOSA HYDROLOGÍC UNIT	west and	x	ı x	x x	XXX	X X X	
	CYTTONRALS MARSH	WETT ANDS	x	x	x x	XXX	X X	
	AMARGOSA RIVER WETLANDS AMARGOSA RIVER	METLANDS INTERMITTENT STREAM	X X	x x		XXX	x x x	AMARGODA DIBAREA GA
	FALT: FREEK	PERSUNTAL STREAM	х	x x	X X	xxxx	x	AMANGODA PIBAREA GA DE ATH MAI NY GROGOGRATER
	SARSTONA SHRING S	SEKINGS CURL NATE	XX	X X				TEACH VALLEY ON
	CUTTY'S RANCH SPRINGS SCOTTS'S CASTLE SPRINGS	GERLINGS STRUNGS	ХX	x x	x x	xxxx		DEATH VALUEY ON FATH VALUEY ON
	SENDA CORFACE NATIONS		хx	x x	x x x	x x	х	
	KINDA WESLAND	SPR'NAS SPETE HMSSGENT/MARSAES	x[x]	x x    [x	x x x	[ ] x[x x	x   x	
609.10	DEATH VALLEY HYDROLOGIC AREA				y []			11:1:1:1:
	EINOR BURFACT NATERS MINOR WETLANDS	SERTINGS SEEDS EMERGEDS MARSHED	x	x x x	x x x	X X	x x	
609.11	STOVERIPE WELLS KYDROLOGIC SUBAREA	S PS 1 NO / EMH ROPENT	x x	x x x	x x	x x	×	ANARGONA RIVER
	AMABOY A SPROPO	SPRING EMERGENT	хх	x x x	x x x	X X	x	SEATH VACIFY OF
	STOTIFF SPRIM: TIMPAPAE SPRIM:	GPR: NG/EMERGENT SPR: NG/EMERGENT	XX	X X X		X X	X	AMARGONA R I DRATH VALLEY OW AMARGONA R KOBATH VALLEY OW
	Nº HO F SPRINGS	SPECINGS/EMERGENT	x x	x x x	X X X	x x	X	AMARODGA RIVES
	SARACISA SPRING	SPSENGS/EMPS/FMI SIGENGS	X X	x x x		X X	x	AMAKOCSA R.VER RITTE VI GWANGI, SEG. YN, WE
	MANUM PEAK EPRINGS LITTLE, SQUAR, A WILLIAM SPRINGS	SP41605	<del>x</del> x				- x	ANVIE SPG CYN WS DEATH SI LAN
	CAVE, CYCT MAYOT, AND ARRASTRE MERINGS	LIPCINGE	хх	x x x				AMARONIA H. VS.9, "BATH VAL. W
	RECYLLIS, 1987 -PRINCS GROPSTARE SPRINCS	SPACEGE SPACEGE	X X	x x x		X X	X X	ANVII SEG. CYN, AMARGJ6A > WARM SEG. CYN, AMARGG6A E
	MAK PENTAN	NPP ( NOT	x x	x x x	x [x	x x	x	WARM SPC CYN, AMARGOSA R
	BYDDES YERINGS MINOR BURNACE WATERS	SHEINGS	x x	x x x		X X	x	RACCES MASSI, DLATE VA., GW
	ATMON MECTANDS	SPRINGS GERPS PREKGENT/MARSHES	хх	x x x		x x	ХX	
600 12	EARRISBURGK EYDROLOGIC SUBAREA	with the last			1 1 .	1 . 1		
009.12	ALDER ALBERTE MV. FERR		x x		x x			
	NIN'S WECANDS	SPRING /REEDS EMERGENT MARSHES	x x	x x x	X X X	X X	x x	<u> </u>
609.13	NINGATE NASH HYDROLOGIC SUBAREA	[ 1 x L 4 x L L L L L L L L L L L L L L L L	i	<u> </u>	1 L .			<u>. 1 i - 1 i - 1</u>
	NINCE MOTANIA	DIPPLINGS DEEDS / EXERGENT / MARSHES	XX	x x		X X	x x	
	NIN H WAT, AND	DIRECTOR DESIGNATION OF THE PROPERTY OF THE PR	12121	12121 121	<u>^                                      </u>		11010	
609.20	SILUAIAN HILLS HYDROLOGIC RAEA		x x	x	x x	x   x		: : : : : : :
	MINOR SUMFACE WATERS MINOR WESTLANDS	SPHINGS STORPS EMERGENT MARSHES	XX				xx	
			· · · · · · · · · · · · · · · · · · ·			·   · · · · · · · · · · · · · · · · ·	4 ·····	- parties - Proposition - de consente
	AVANATE STOROLOGIC SUBAREA SIX P HURFACE WATES		x x	x	x x	x x		
	SINCE WORLANDS		хx	xxxxx	x x	x x	ХX	
609.22	RED PARS HYDROLOGIC SURAREA	K3. I. I. Y. I. I. J. I.	l : l	.	.   :	:	:	; ; <u>  ;   ;  </u> .
	RED PAGG LAKE	MAN I TAKE	x	x x		x x x	X	INTERNO DEN LEVACO PASS LE GAL INTERNO DEN LE SON PAGS LA GAL
	NO NAME LAKE MINOR STREAT MATTERS	ADMALI DAKE	x x	X X	x x	X X		
	MINOR VETAKE	SPRINGS SEC-ES/ENERGENT/MARGHES	хx	x x x		х х		· · · · · · · · · · · · · · · · · · ·
609 22	VALUERN SYDROLOGIC SUBAREA							
	STEURYAN CAKE	MIRAY : TAKE	x			x x x		STEERIAN "KAST URTAN MAE GW
	AINGSTON SPRING FOYOTE BRUES NERTHY:	SPRING/EMERGENT CTRING EMERGENT	X X	X X X		x x	x	SITATRIAN EXPOSESSION VAN ON KINGSTON W. SALT C. SECONOMI
	SARREL HOLLS 1 / REINS	STRING EMERGENT	x x	X X X	x x x	x	x	STERRIAN SAKE STERRIAG VALUE
	MINOR SURFACE WATCHS	JERTINGS SEEDS HINGS PAIT MERCHES	X X	X X X			хx	
	MINOS WELLWAY S	CONTRACT TORSE PARKAGENIAMENTES	1~1*1		مامزني	ا^ر		·
	SKADOM NYDROLOGIC SUBAREA	TANDERS EMERGENT	x x	x x x	X I IVIV	וען וען	17	SHADOW VALLEY GW
	TW . FAR SPRINGS MINUS SUSPACE WATERS	- icological consists EMERGENT	x x	x x	x x	X X		
	MINOR WITLANDS	CHAINGS SENEN SMERGENT MARSHES	x x	XXXX	x x	] x [] x	ХX	
609,30	ETAN EYDROLOGIC AREA		<u> </u>	1 , 1		i I :		111111
	MINOR STREET, WATERS		x x	X X	X X	X X		
	MINDS WETLANDS	JPRINGS STEPS/EMERGENT/MARCHES	IX  X	x x x	*        X   X	XX_	XIX	·
	FURNACE CREEK RYDROLOGIC SURAREA		إجب				الجنب	:   ; ; ; ;
	MINOR STREAM WATERS	VPRINGS SEESS EMERGENT/MARSHES	X X	x x x	X X	X X	v	1
	MUNO- MELLINIE		12121					
	GREENMATER HYDROLOGIC SUBAREA MINUS NURS ACE WATERS		X X	x x	x x	X Y		
	MINOR WHITAMUS	JOH I NOS ZIS SEPEZ EMERGENT MARSHOD						İ

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/BUBUNIT	WATERBODY			BENEF	CIAL	uses				
HU No.	DRAINAGE FEATURE	CLASS MODIFIER	5 6 A	6 6 5 5	POW MC-1		E O	9 5	1 a		RECEIVING WATER
HU MO.			1212121	FISICI	12 2 2	8 3 5	8 3	8   3	2   2	IK	<u> </u>
	AMARGOSA DESERT HYDROLOGIC AREA	<u> </u>	(1,1)		1 1 1		:	! !	:	.	1 1 1 1 7 7 1 1 3
	MINOR SURFACE WATERS PIECE WIT ANDS	SPRINGS / SPL 25 - PMINE STOT (MAR DIES	XX	X X	XX	×	X	ž.		П.	
	STEEP WET AMOS	SPRINGS / SELVES PARTHURST / MAR SIGN	X X	1×1×1	I IXIX	LILIX	]X	<u> </u>	X1	X X	<u> </u>
	CALICO HYDROLOGIC SUBAREA				الإدبا	ار ز د				t i	<u>. :   1   1   1   1   1   1   1   1   1  </u>
	SALSHERRY SERTING MURTICOMERY SPATIOS	SPRING/PMS-KIENT SPRING PMCSGDVT	XX	XX	X X		X		X	X	AMARGOSA RIVER
	MINOR SLRSACE WATERS		XX	X	X X	H X		×	1	x	AMARGORA KINEH
	MINON WETTANER	SPRINGS, SEEPS REMERSENT, MARSHES	хх	хх	ХX			x		ХÞ	
600 43	SEOSHONI EYDROLOGIC SURAREA							1 .			
	WILLOW SPRING	*PRING/RIFARIAN/SMEROSHE	хх	X X	X X	X	x	x	x I	x	AMARIDHA MIVER
	DECORA HIC SPRINGS	-PK)Mia	x x	Х	ХX	X		ХX	x T		DEATH VALUEY OW
	TEODRA MARSHER GRIYIGIAM LAXE	MARSHES EMERITENT LAKE EMERGENT MARSHES	x x	X	XX				x	X 3	DEATH VALLEY OW
	SHOSHICKS, SIPCING		xx	хx	x x				<del>≨H</del>		AMARIX SA RIVER
	- 50° W - 1918   188.		X X	X X	ХX				x		AMASKKINA PIV-S
	AMARGOJA RIVER TEXCIPA RIBARIAN WELLANDS KINGS GUSEACE WATERG		X X	x x	X X	H X		x	×	XX	AMARGONA RIVER
	MENOR WEDLANDS	SPRINGS MERGS EMERGENT NARABER	x x	хx	x x	х	х	х		ХX	
	RESTLING SPRING/SEANISH IRAIL RIPARIAN METLANDS	JPRING'RIPARIAN EMERGENE	X X	XX	X X				X I		AMARG ISA RIVEN
	NHERIPHARI STRING Mina R STRINGS WATERS		XX	x x	X X				X X	11	AMARGOSA RIVER
	M'ROR WETLAKES	SPRINGS/SERBS EMERGENT/MARSHE -	хх	хx	ХX				×	ХX	
Ex. 906	CHICAGO HYDROLOGIC SUBARRA	. <u> </u>		<u> </u>	7 1 -					_	
l [	Minick SURPACE WATEAS		хх	x	хx				X .	П	
[	DOKATISM AURIEM	G9R1NG9/SERHS/FMRRGENT/MARSHES	x x	x x	x x	X	X	x	x	ХX	
609.44	CALIFORNIA VALLEY NYDROLOGIC SUBAREA			1 _1_	) ]_1	(1					
[	SELN AGRINO		х×	хx	ХX		х		X		CAT DECENIA VALUEY ON
	HYSYM SPRIME MYNDA NISPACE WATERS	SSR1NG/EMERGEN*	x x	X X	X X	X			x	x	CAS IPPORNIA IVATILAY GIN
	MINDS SIRFACE WATERS MINDS SPKINGS SESPS/WETLANDS	SPAING SEEPS/ENERGEN**	X X	X X	X X	X			×	x x	CASTPORNIA VALUEY ON
	PANERUMB MYDROLOGIC UNIT MINOR RURFATE WATER,		x x	X I	XX	x x	1	X	χ		
	MENON WEST ASION		x x	хx		x x		x	x	хх	
	MESQUITE MYDROLOGIC UNIT	ALKALI LAME	ХX	x	x x	x x	х	x T	-	х	INTERN! DRN LARS / KEROLI II:
[	HORRE THURS SPRINGS	Philas bashcoa.	XX	x	ХX	х х	¥	×П		х	MESCUITE VALUEY ON
	MINTER WORLD WATERS		X X	XX	X X	x x		x	+ 1	x x	
l '	atos e lend Minus	SERVINOU BEES SERVENT/MARCHES		A   A	11010	^ I X		~1		TVIX	·
	IVANPAR HYDROLOGIC UNIT	<u> </u>						1	Į.		
	INAMPAR LAKE		XX	X X	X X		XX	×	╁	X X	INTERNY DRN LE, LJANPAR VAL GW EVARPAR LARCY
	KILEOW SPACING	SPRINGS EMERGENT	x x	x x	X X	X	[x]	x		х	EVAKPAR TAKS
	MINERAL SPRING		X X	X X	X X			×	++	X	IVARPAE LAKO
	MERATUK UNMING DIJEH JANYON EPHING		$\hat{\mathbf{x}} \hat{\mathbf{x}}$	x x	-   2 X			<del>x</del>	+	x	IVANPAF LAKE
1 [	CAUGHTERHOUSE SPS ING	JPRI NGS / EMERGENT	x x	x x	ХX	X	x	×П		x	IVAKPAN LAKE
	SACATON SPRING		x x	X X	XX			X X	₩	x	IVANDAR LAXE
l I	H.NA SERINGS HARDROCK QUEEN SERING		x x	x x	1 2 X			<del>âl l</del>	++	<del> </del>	WHEATON WASH
[	DROWNER SPRING		XX	ХX	X X			x	П	X	WHEATON WARH
	PINTPER PRING KLIDON See, SO		XX	XX	X X	<del>  x</del>			<u> </u>	X	IVANPAIL LAKE LANPAIL LAKE
	NATE MERING	CERTINON SAFRORED	X X	x x	X X		x	x	x L	x	IVANPAH SANE
	COMMODS SPRING		XX	X X	X X	×		×	+	X	TVAMPAH TAKE
612.00	IVE CAR SPRING  [VANPAR HV (continued)	SERTING COMMERCENT	XX	1717	X X	++*	<del> ^</del>	╩┼┼	++	X	IVANPAH LAKE
	TABIN SERING	SSR1NAS/SMRRGRNT	ХX	ХX	хx			×		x	IVANPAH LAKE
	MINOW STUBACE MATERIA		XX	x x	X X			X .	╫	x x	
	AT MON-METHORISE	SERVINGS SEERS EMERGENT MARKETES	A   A	10[0]	1 10101	1 1 2	141	^		1~1^	1
	CMLSHEAD MYDROLOGIC UNIT	3	V V V	V 1			1 0 1		Ţ.		
	MINOR SURPACE WATERLANDA WETLANDA WETLANDA		x x	x x	x x		x	X	++	хx	
											•
613.10	LOST LAKE HYDROLOGIC AREA	ALXAGE DAKE	x i	X	1212		Ϋ́	χĪ	7"7	77	INTERNALLA DRAINEC LANS
<b> </b>	AUDOS SISHAA SIWATERS	Anne	хx	x	x x	x x	╚	x			INTERNALLA DRAINET LAME
	YANS WETLANDS	SER MUSSISEEPS EMERGENT MARSHES	хх	хх	ХX	x x	х	x	$\Pi$	хх	
613.20	ONL LANG SYDROLOGIC AREA		1.1 :	: 1	المازان			الح			3 1 / 1 1 1 1 1
ļ [	WL LAKE	ALKALI LAKE	x	x	ХX		х	x I	$\prod$		INTERNALLY ISWAYNED LAGE
	pust, specific		x x	x x	X X	¥ ×	х	<del>*   </del>	$+\Gamma$	+	OKC. EAKE
	MINDA SURPACE WATERS MINDA WETLANDS		xx		x x					х×	
	LEACH SYMBOLOGIC UNIT		x x	x	ХX	x x	x	x I	77		
	KINOS WETLANDS		хх		ХX					хx	<u> </u>
	MANITE HYDROLOGIC UNIT **1809 STEPACT WETERS		х	x	x x	x x		χ	TT		
		SPRINGS GERPG FEMORGENT/MARCHES	х	ХX	] [x x	x x	x	x	П	ХX	1
615 10	WILEAN HYDROLOGIC AREA			; <u> </u>	المناز			الحوز			1 1 1 1 1 1 1 1 1 1
	MILEAN HYDROLOGIC AREA MILEAN LAVE	ALKALI DAKE							Ш		INTERNAL : DAAINE LANE
	KINGE SURFACE WATERS		x x	X X	X X		×		++-	хx	
Ŀ	PINOR WITHARDS	SPRINGS/GREPS EMORGENT/MARCHES	للفيف	14141		^! [^		~! !		1 ~ 1 ×	
	TELSON HYDROLOGIC AREA				إإيا	1			7.		
	MELSON ARE HINDE SURFACE WATERS		x	×	┼┤╣╣	x x	⊢ľ	X	++	₩	TRITESNALLY DRAVBLE LAK-
	HINCK MELTINEDR		хx	хx	x x	x x	×	x	11	хx	
616 0AE	NICYCLE HYDROLOGIC UNIT										
	ALCYCLE RADROLOGIC UNIT		x l		XX	x x			TT		
Ľ		I									

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY	BENEFICIAL USES RECEIVING
HU No.	DRAINAGE FEATURE	CLASS MODIFIER	WATER 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	MINOR MELITARES	SPRICKS, SEEPA SMERGENT MAKSHES	X X X X X X X X X X X X X X X X X X X
	GOLDSTONE ETHROLOGIC UNIT	ALEA, 1 [AKP	
	PIGNICH LAKE	ALKACI LAKE	X X X X X X X X X X X X X X X X X X X
	GOLDSTONL LAKE	:AKb	X X X X X
	MINGR STREAM WATERS		X X X X X
	MINOR WETLANDS	SEPTINGS / SEPERATEMENGEN LYMARS HER	
61 B OI	COYOTE HYDROLOGIC UNIT		to the start of a spanish and a community of paints of a spanish a spanish at the first of the fact that the spanish
	PARAO'SE SPRINGS	PR'NUS, HOT SHRINGS	X X X X X X X X X X X X Y Y Y Y Y Y Y Y
	JACK SPRING	SPRINGS	X X X X X X X X X COYCTF LAKE UN
	COYOTE LAKE JACK RABBIT SPHINGU		X X X X X X X X X OOYOTC LAKE
	JACK MABBLE SPRINGS VINON JUNEACE WATERS	<u> </u>	X X X X X X X X X X X X X X X X X X X
	ATM H MECPANIA	SPE, NOS SEEPS FMPHGEN; (MAHSE2)	
l '			
	NUMERICA NYEROLOGIC UNIT		
	RUPERTOR LAKE	LAKE	X X X X X X SUPERIOR LARS
	INDIAN SEPTING / INNAMED LOSSS	SPRENCE LAKE	X X X X X X SUPERIOR LARD
	MINOR SURFACE WATERS		X   X   X   X   X   X   X   X   X   X
	STINCK WESTLANDS	SPRINGS / SEEPR/EMPROENT/MARKHES	X X X X X X X X X X X X X X X X X X X
	MAILARAT HYDROLOGIC UNIT VINOR SURFACE WACERS	langah or di makka ada melamahan ada sedan s I	
	YINGH WETLANDS	SPRINGS/SEEPS/EMPROENT/MARSHES	X x
	WINGATE PASS SYDROLOGIC AREA		
	MINCH SURFACE WATERS	SPRINGS/SEEPS EMERGENT MARSHES	X
'	MINON METLANDS	Terrenderannes mendent FARSHED	
620.20	NTEDROSE HYDROLOGIC AREA		
	VINCH SURFACE WATERS		
	ATIK E MoultyNDR	SPRINGS NAMED STEEN FOR STANKINGS	
620 21	NHITE SAGE HYDROLOGIC SUBAREA		
	MIN'R - PHARE WATERS		X X X X X X X X X X X X X X X X X X X
	MINCP WPTLANDS	SPRICLIS/SEPPR/SMERGENT/MARGINGS	x x
	NIED ROSE PEAK SYDROLOGIC SUBAREL		
	MINCH STREAMS WATERS MINCH WESTANDS	SENTING: SEEPS/EMPROENT/MARSHES	
l '	ATTA- D. SECTIONS	A DI A PIN A DI A PIN	
620.30	LEE FLAT SYDROLOGIC AREA		mander frankriger og frankriger frankriger frankriger frankriger frankriger frankriger frankriger frankriger f
	MINGR SURFACE WACCES		X X X X X X
	MIN R WESTANDS	SPRINGE/SREPS/EMERGENT MARSHES	x x x x x x x x x x x x x x x x x x x
620.40	SANTA ROSA FLAT SYDROLOGIC AREA	adad v I i i I i	
	MINOR JURNACE WATERS		X X X X X X
	YINDR WETLANDS	SPS.NGS SEEPS/EMPRGENT/MARSHES	
620 41	MALPAIS MESA HYDROLOGIC SUBAREA		
	VINCH SURFACE WATERS		X
	*INOR WETLANDS	SPRINGS/SEEDS EMERGENT MARSERS	X X X X X X X X X X X X X X X X X X X
	<del></del>		
620.42	RAINSON KYDROLOGIC SUBARIA YINGH SUBFACE WATERS		
	KINDA MPTLANDS	SPA: NGS/SEEPS/EMERGENT MARSEES	X X X X X X X X X X X X X X X X X X X
I :			
	HILVER DOLLAR HYDROLOGIC SURARRA		X X X X X X X X X X X X X X X X X X X
	YINON JUNEACE WAISES VINCH METIDADS	SPRINGS/GEEPG/FMERGERT/MAHUHES	
l '			
620.50	DARWIN HYDROLOGIC AREA		<u> </u>
	YINGH WESTANDS	SPSCINGS/SEEPS EMENGEN* MARSERS	X X X X X X X X X X X X X X X X X X X
	*INCH WE LISTED	SERVING COLUMN BURNERS BURNESS	
620.60	PANAMENT VALLEY HYDROLOGIC AREA	The first teachers	
	HELFANDS SPRING, DOWN THE PALE	SPRING, CREEK	X X X X X X PANIANT WALLEY GH
	GOURDOUGH SPRINGS	549 ( RG/ 549 ( RG/	X X XX X X X X PANAMENT VALLEY OF
	GODER CAN SPRINGS LINNAMES F VINON SURFACE WATERS	1000	X XX XXX XX X
	Athor Method a	PR'NGS GEEPS/EMERGENT/MARSHES	x x x x x x x x x x x x x x x x x x x
l		1 2 2 2 3 2 2 2 2	
	BROWN HYDROLOGIC AREA MINOR GURFACE WATSHA	Little Little 1941 3	
	MINOR SURFACE WATERS MINOS WEFEARLS	OPRINGS SEEPS/EMENGENT/MARSHES	X X X X X X X X X X X X X X X X X X X
l '		_	
620.80	ROMBERS HYDROLOGIC AREA		
	DEAD PIPS SPACEOUS	SERINGS	X X X X X PHICT KNOS VAL. PANAVINT VAL.
	MINDA RIGINATE WATERS MINDA WITHARDS		
	- Ariana		
621.00	TRONG HYDROLOGIC UNIT	<u> </u>	
	CEASLES DRY LAPP BFD	SALTINE LAKE	X X X X X X X TERMINAL STATUTE LAKE
	M.NOX SUBPRET WATERS MINUX METUANOS		X
	and the same		
	REARIES VALLEY SYDROLOGIC AREA		المنافة الماست فالمنتقاب إمراج إمنيتها إلى المنتقل بالمنتقب إسراب إسراب إسراب إسراب
	PEACU SERINGS	APR I NOS	X X X X X X GERRY GROUNDSTER TO THE TOTAL CONTROL OF THE TOTAL CONTROL O
	ORDER STATE OF THE NE COMMEN OF THOSE W. GLAD ORDERS OF THE HOMEOUND CAN GLAD OF THE HOMEOUND CAN GLAD	SPR (NGS ~PH LNGS	X
	MITCH THE HOMEWOOD CAN QUAL.		X X X X X
	MINOR WETLANDS	WOLLYNDS	x x x x x x x x x x x x x x x x x x x
l '			
621.20	SALT WELLS EYDROLOGIC AREA MINON SURFACE MATERS		
	MINOR NUMPACE MATERS MINOR WITHANDS	1	X X X X X X X X X X X X X X X X X X X
l '			
	PILOT KNOB HYDROLOGIC AREA		
	CERP STRINGS CEANUR WELLS APPLICAN	SPAINGS	X X X X X X X X X X X X X X X X X X X
	CONTRACT OF THE PARTY OF THE PA		

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	-				_				_	_			
	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	Ь		BEN	EFIC:	IAL	USE	в ТТ	П		П	RECEIVING WATER
EU No.			10 Mg 02	e # #	2 8	7080	110	9 3 1	9 5	2		ğ 9	
	MINOR SIFIACE ARPERS MINOR WESTLANDS	METLANES	X ·	XX		X	X	+	X	Н	+	x x	
	COSO NYDROLOGIC UNIT	THE PERSON	!   :	11		, i		Ţ			Ţ	ļ	
	VINCH WETLANDS		x x	x x		XX	- X		X	Ц		X X	
	NIED NORSK HTDROLOGIC AREA VINTH SURFACE WACENCY	F L. [ 4 ] [ ] [ ] [ ] [ ]	  x x	x			[x	į	;  x	ļ,	H	Ħ	: i - [: :   ]
	MIN P AND LANDS	PSC, I WING.	хx	x		x	x	+	Î	Н	$\pm$	X X	
	AIRFORT SYDROLOGIC AREA	ALKAIT LAND	x	: :	,	(x)	×	x	x		ŢĖ	į	.MTERNALLY DRAINED LAKE
1 :	MSUSTACE SPRINGS & UPSTREAM	SPR INOS	x	]x	1 3	X	x	_1_	[x]	П	Ţ		MT SPR LYN MSH [NDIAN WELL ON
	airfort hydrologic affa Mingr sirfage anters		X	X		X		7	]x[				
Ι,	MINON WEXTARDS	METLANDA	[x]	x x	1 12	x	x	J	]x[	ш		χĮχ	
I [	M'MOR SHRPACE WATERS	MPICANTS	XX	x	112	X X	x x	T	X		П	X X	
Ι,	INDIAN WELLS KYDROLOGIC UNIT			لسنشا		141			1			<u> </u>	
	IPDIAN WELLS "4810N WF"1S" MINUR SURFACE WATTAS		x x	x x		x	X		X X	Н	T	7	INDIAN WELLS VALLEY ON
	MINOR WETLANDS	ÆTLAKE:	xx	ХX		x	x		x		Ш	хx	
	ROSE HYDROLOGIC AREA	LUI - C - II. I - E I I I I I I I LUI I I LUI I I I I I I I	X X	x .			x		X		, L	7	CUTTLE TAKE
	DOTTED LANE CARTON USER INTERNITTENT CRISCIARY		x x	X	7 7	X	X		X	H		х	LITTLE LAKE
	KINDE BETANE KINDE BETANE	MPTLANOS	x x	X X		XX	X		X	Н		X X	
	CHINA LARE HYDROLOGIC AREA KING MILLO CARYON CREEK	CONTRACTOR STREAM	x x	x i	1		[ VI	¥	,  x			Ą	DOCIAN MALLS SCHOOL CA
	LANK SEEP DAGGOR	LAKE SPRINGS	XX	x x	112	X	x	Ι.	ХX		x	х	DECIMAL RELES STRUMET ON LARK SEED
	CHINA LAFE HA (continued) APPLING IN FREEMAN CANYON	SPR: 1405	xx	x		X	×		x	Ť	Ť	+	FREEMAN OPFIN
	DRI 1999 PECUPA DES PECUPA	SPRENGS SPRENGS	X X	x		X	X	X	X X	Н	$\mathbb{H}$	+	INCHAN WELLS WALLEY SK
	MOSCON STRINGS (31	414C4C5	XX	X	l l×	X	X	x	X X			$\pm$	CHETSALI WO RIM BALCHI, HEW FINTERNE
	BIS SPRINGF INDIAN WELLS CARRON SPRINGS	SPACKOS SPACKOS	X X	x	7	X	X	X	X	Н	$\perp$	$\pm$	INDIAN WELLS VALLEY GW INDIAN WELLS WILLEY GW
	GRAFEVING CYN DERLYGN SROPI CYN IERLYNN	SPRINGS SPRINGS	XX	X	7	X	X	x	X	H	$\pm$	+	INDIAN WELLS SHILLY SH INDIAN WELLS SHILLY SH
	HINA CARP SPRINGS  MINOR SURFACE WATERS	2ht 1.4.2	XX	x		X	X	x	X		$\Box$	+	O DE ANTER SECURI ON COLUMN TRECORT
	YINCH SURVACE WATERS YINCH WETLAND'S	NET LANDS	XX	хx			x		x	Н		ХX	
	PREMOTE MYDROLOGIC UNIT  NEW PEAC SETLANDS	WETTANDS, PERFUNCAL		x	l k	i x	X	P	X		;	x x	TEACHERY V & GN
· ·	METHANDE ASOVE MEN DAY L MOST SZKING EN THUCKES BOADT TSABIGED	FPHEMERAL STREAM SPRING	X X	X		x	X		x	П	Ŧ	хx	TRANHADI VININA TRACHADI VININA
2	CHE CHECK PASS SEPTINGS MILEDS CAP OR PASS, 0 . MI DENSTRIAM FROM SPROS	SPRENGS WEST, ANDS	x	XX	x	X	x	1	x	Н			TEACHAPI V S GW TRACHAPI V S GW
	LAF CREEK TANYON WETLANDS LIK-FIL SPRING	VEZTLANDS NER PICS	XX	X X	7	X	X	$\blacksquare$	X	Н			MAK CRESK KELSO VALLEY GROUNDMATER
	OUATE EPRING	SPR FMGS	XX	- <del>X</del>	7	X	X X		X			X	CONTENION OF THE PROPERTY OF THE CONTENION OF THE CONTENI
	COMP MAKE THEE		XXX	X	,	X	X		X X	Ħ	$\parallel$	+	CACHE CREEK
	OPPER CACHE CREEK OPCHE CHEEK (ACHE CHEEK 2)		X X	X	l l	X	x		X	Ħ	$\parallel$	+	FREMONY WATER
l [	PRINCION DRY LAKE, DICE NWG 38 DEFENCE SOUTH OF PROCESS LAND	SPRINGS	XX	X	7	x	x		x	H	П	+	PROCTOR LAXE PROCTOR LAXL
	ALTLANDS/CAMERON CAMP Y 36 OFFRAME (W SCAMD)		X	x	X	X	x	$\pm$	x	$\mathbf{H}$		ХX	CACHE CHESS LACHE LRESS
[	NEE- SOUTH OF CAMERON CANNON NEES ON SLOVE 5, OF CAMERON FIN NO.		X X	X	l x	X	X	$\perp$	X	H	+	$\pm$	CACHE CREEK
625.00	RPGING W GO CAMERON CONTROL NO FREMONT BU (continued)	SPR1NG	××.	x		×	×	1	X	$\Box$	$\sharp \sharp$	+	CACHF CREEK
			<del></del>			( x	x		x	ı L		X X	GSOIDEMALER
	TERATHAPI WILLIAM SPATROZ HE WETLANDS SPARA JAZZ LAKE		XXX		l x	X	X		X	₩	++	+	
	TEMATHARI WILLIAM SHATKUZ KR WETLANDS MYSHA, LAVI JAKE WEDINITE OPENING MED MOCK CAMMON CHECK	SPRINGS	XXX	X X	3	X	X	$\pm$	x			+	FRENCHT VELLEY 3W FRENCHT VELLEY FOREN LAND
1	CONCINENT WILLIAM SPAINCE HT WETLANDE WISHIN (WY LAME WED DOCK CAMERYN CHEFY WINE FINHANCE WATERS	SPRINGS	XXX	X X	) x	X	X	Ŧ	х			x x	ESEMENT VALLES ON EXPENSIONS
625.10	CONCINENT WILLIAM SPAINCE HT WETLANDE WISHIN (WY LAME WED DOCK CAMERYN CHEFY WINE FINHANCE WATERS	SPRICES EXTENSES	x x x x x x x x x x x x x x x x x x x	X X X	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	x x x	x x x		X X X	П		x x	ESPECIAL AS TRE BETTER LVS1
625.10	TENACHRIC WILLIAM SHATSKE HE WETLANDS  W SHE, WAY LANT  W SHE THE SECOND SHATSKE SHATSKE  WED HOLD CAMPAN CHLOP  WHICH SHATSKE SHATSKE  WHICH WETLANDS  DOWN APRIMOS WYDENLOSTE AREA  WHICH SHATSKE HATERS  WHICH SHITLANDS	SPRICOL  SPRICOL  NOTE - NOS	x x x x x x x	X X X	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	x x x	x x x		X X X	П		x x	ESPECIAL AS TRE BETTER LVS1
625.20	TENCHARY WILLIAM WAYNOU HE WETLANDS WYSH, WY TARE WYSH, WY TARE WED HOSY FOR YOUNG WED HOSY CAMPON CYRLY HED HOSY EARTHS HINDS WETLANDS DOWN APPLIANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS WHINDS WETLANDS	SPR(103) N2TL NOS	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	3   3   3   3   2   3   3   3   3   3   3   3   3   3   3	X X X	X X X		X X			x x	SERVIT VALUE BUTH LAN
625.20	TEMPORET VILLIAN SYNTACT HE METLANDS WERE LAND TARE WERE LAND TARE MED HOLD CAMPEN CHAPP MED HOLD CAMPEN CHAPP MED HOLD CAMPEN CHAPP MED HOLD STATES  DOVE APPLIESE MITTER  MED HOLD STATES  EXEMPLE MITTER  E	SPRITION AND LANDS HELLANDS	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	x 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	x x x x x x x x x x x x x x x x x x x	X X		X X X			x x	SERVIT VALUE BUTH LAN
625.20	TEMACHEC WILLIAM WAS SECURE ARTHANS  PERCHITZ WAS LAND  PERCHITZ WAS LAND  PERCHITZ WAS LAND  PERCHITZ WAS LAND  PERCHITZ WAS LAND  PERCHIPS  PERC	SPRICES  SPR	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	3   2   3   3   3   3   3   3   3   3   3   3	X X X	X X X		X X X			x x	FARMOR WILLES AND TEACHER FAND
625.20p	TEMPORET WILLIAM SYNTOCU BY METLANDS  PERCHITZ SYNTON  MED SONY CARRY  MED SONY CARRY  MED SONY CARRY  MINOR SYNTONION  MINOR TENNONION  MINOR TENNONION  MINOR SYNTONION  MINOR TENNONION  MINOR SYNTONION  MINOR	SPRICES  SETTLANDS  HESTLANDS  NOT LANDS	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	2   3   3   3   3   3   3   3   3   3   3	X X X X X X X X X X X X X X X X X X X	x x x		X X X X X X X X X X X X X X X X X X X			x x x	FARMOR WILLIA DA  SONWERT WILLIA BUTCH LAN  THE STATE OF
625.20 [1] 625.30 [1] 625.40 [1]	TEMPORAL WILLIAM NAME OF BIT METLANDS  WERN, NAT LAND  WERN, NAT LAND  WERN, NAT LAND  WERN, NAT LAND  WERN, WERN, LAND  WERN, WERN, LAND  WERN, WERN, LAND  WERN, WERN, LAND  WERN, WERN, LAND  WERN, WERN, LAND  WERN, LAND	SPR (103)  NOTE - NOS  NOS  NOS  NOS  NOS  NOS  NOS  NOS	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	x 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	X X X X X X X X X X X X X X X X X X X	X X X X		X X X X X X X X X X X X X X X X X X X			x x x	FARMOR VILLES DE SOUMERT VILLES EXTENTANT  ANDRE LAGS RADRE LAGS RADRE LAGS RADRE LAGS
625.10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	TEMACHMENT WILLIAM WAS NOT HE METLANDS  WESSELLY TYPICHOS  MED HODY CAMPUN CALPY  MINOR METLANDS  MINOR METHANDS  MINOR METHAN	SPRITION  NOTICENDO  NOTICENDO  NOTICENDO  SPRITION  SPR	x x x x x x x x x x x x x x x x x x x	X X X X X X X X X X X X X X X X X X X	X X X X X X X X X X X X X X X X X X X		X X X X X X X X X X X X X X X X X X X		x x x x x x x x x x x x x x x x x x x			x x x	SARSON VILLES DE SERVINT VILLES BETHELDE  SARSON LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS VILLES LAGS

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

	HYDROLOGIC UNIT/SUBUNIT	WATERBODY		-	В	ENE	rici	IAL.	USI	ES	-				
L.	DRAINAGE FEATURE	CLASS MODIFIER	AGR.	8 6 5			7 ¥	<b>1</b> 5	9		i i		ş		RECEIVING WATER
HU No. 626.00	ANTELOPE SYDROLOGIC UNIT	kali III. Jahran Kalendarian						١ :				1 4	8	8	
l	MOCEANS LAFE WETLANDS	METLANDS PERSONICAL STREAM		x x	Π.	X	x x	Z	П	хх	П	Ţ	П	X :	
l	WITTER ROCH LAFEK	INTERVITIENT SURLEY	x ^	^ x		X	x x	Т	x	X	П	+	Н	$\pm$	ANTELOPS VALLEY OF
	DIG ROCK CREEK	PERFURIAL STREAM PERENUIAL STREAM		хх	$\Box$	X	ХX		х	х	П	T	x	ightarrow	ANDELOPE VALLEY GW
l	PRINMONE RESERVOOR	RESERVOIN	X X	x x	╁┉┼╌		x x		×	. x		+	M	+	L.A. AUTEDICT
	HARRID NENEWOLD	RESERVOTA	x x	ХX	$\Box$	X.	x x	X	ī	х	П	#	Ħ	#	ANTELOPE VALLEY ON
	TITELL SXLX RESERVOIR TAKE PALADALE	HESERVOTA RESERVOTA	x x	X X	#		x x	╅	x	x	Н	+	H	+	ANCELOTE VALLE, OK A. AOGEOUT
	ANTELOPE NU (continued) MIPOR SURFACE WASERS	_			П	TT	Ш	1		-		1	П	#	
	MINER STREET WAS ENGLANDS	WPTF AND 2	x x	X X	<del>.    </del>	x	x x	X	×	x	H	t	Н	x :	-
626 10	CHAPEE EYDROLOGIC AREA		:												
	MINOP SURFACE WATERS		x x				Y					T.	П		,
	MIRCH WETLANDS	NOTERMOS.	X X	] X ] X		X[	x]	×	П	X		L	Ш	X Z	
	GLOSTER HYDROLOGIC AREA	برا د المنظمة المستند							ų Į	<u></u>			Д,		<u></u>
	MINOR SIRPACE WATERS MINOR WESTAKOS	WETLANDS	x x			x				X		+	Н	x z	1
						,	, ,						_		
D26.30	WILLOW EPRINGS KYDROLOGIC AREA MINOR SURFACE WATERS	) <u>                                  </u>	XX	X	т	X	х	×		X		7	ri	₹	
	MIRGE WETLAND	KPT JANDS	XX	X 3		X		Х		X	Ш	Ι	П	X :	
626.40	MENDACE SYDROLOGIC AREA		; ; [			ļ	: .	l ;		:					
	MINUR GURBACE WATERS MINUP WETLANDS	WELL-ANDR	x x	x	П	X :		X		X	Ħ	F	П	Ţ.	
		THE RESERVE OF THE PERSON OF T	10101	1413		*	*1		-1-1	<b>_</b> 1∧	_	_	ш	~[,	`I
	LANCASTER EYOROLOGIC AREA MINOR SURFACE WATERS		XX	x		X.	хI	X		X	H	7	H	ų.	
	MINOR METCAR'S	WETT, AKEG	x x	X >	1	x		T <sub>x</sub>		x	Ц	土		X 2	
626.60	MORTH MUROC HYDROLOGIC AREA	randud a turi a tu							,	i		i			
	MINOR SIREQUE WATERS		хх	х	П		x			x		Ţ	П		ļ · · · · · · · · · · ·
	MIN R SETTAND	#ETTLANDS	xx	X X		X :	X   ]	X	ш	X		_	Ш	X X	4
	BUTTLE HYDROLOGIC AREA					Į	ij	Ę		Ļ		Ţ	H	Ų	<u>,</u>
	MINON DINIACL WATERS MINON WETCARDS		x x			X		- X		X		+	Н	x 2	
626.BU	ROCK CREEK HYDROLOGIC AREA MINOF SURFACE PATERN		XX	X	T	X :	x	Į x	П	X	m	7	П	Ŧ	
	WEALS MALITYRE, A.	WETLANDS	хх	χx	LI.	X	x .	Jx		х		Ι		X X	
627.00	CHIMORRACK HYDROLOGIC UNIT		I : :		:	.1	!	! i	4		:	!	ł	:	1 + 1 + 1 + 1 + 1
	MINOR SURPACE WATERS MINOR WETLANDS	WFTC.AKDS	x x	X X	H	X.	××	-X	Н	X	$\Box$	Ŧ	Н	$\mp$	
			لللما	1010		1-1-	<u> </u>	1^		10		_	_		
628.00	MOJAVE MYDROLOGIC UNIT  ANDR MARRIANS OF MAJOVE R WETLANIJ	WETLANDS	x x	X		X :	χI	T X	x	X		x x	H	X 2	
	MESTAVE RIVEP		xx	x	$\Box$	x	хx	l.x	×	x	П	Ţ	П	1	UPPER MOJAVE ON RESIN
	WEST FORK MCJAVE RIVER FAST FORK OF WEST FORK OF WOJANS KINEK		X X	x	₩	X	x x x x		X	X		+	×	+	MOJAVE RIVER ON RASIK WEDT FORK MOJAVE RIVER
	TARE OPENIN		X X	X	x	X	x x x x	7	X	x			×	7	BURNT HILL CANYON FANT FORM WEST FURX
	SEEDLY MARYON CROPK SYMY REPUBLIC	PERLIMIAL STARAM SPRINGS	x x	×	++	X :	хx		X	x	х.	ĸ	Н	+	MINTAVIE HYDROLOGIC UNIT GW
	COGNATION SPECIES OF MERCH SPECIES		x x	x	H	X		X	$\square$	X		+	Н	Į,	MAJAVE BIVER BASIN OF
	MINOR FOREST		хx	x		×	хx	×	x	x	1		П	1	
	VENOR WESTLANDS	WETLANDS	x	хх	Ш	X.	x	L×	X	х	<u> </u>	K	Ц	X :	
	EL MINAGE SYDROLOGIC AREA	-4 3 1 1 5 1 i i i i	ببلبا		, ,	ļķ	Ų,			Į.		×	Ц	,	
	HEATH CANYON CREEK (TRIBUTARY TO SHEEF THEES) KINGS JUREACE WEIGHTS		x x	X X		X		┪		×			╂┼	╅	DEER CHEEK
	KONDS WETLANDS		хх	ХX		X.		×		X			П	X 2	
628.20	UPPER MOJAVE MYDROLOGIC AREA		1 1 :	1	;		;		:	1		:	1	,	1111111
	POUSTON CREEK	PERENKIAL STREAM PERENKIAL STREAM	x x	х	H		x x		X	X	$\Box$	Ŧ	П	#	PART FORKWEST FORM
	JERN CRETA		x x	- Î		[X]:	×[×]	Ť	Î	Î	Ħ	土	Ш	1	EAST LORK FARST FORK
	WILLIAM CAREL		x x	x	#	X	x x		X	x	H	+	Н	4	WENT FORK MONAVE
	TROY CERCK	INTERMITTENT STREAM	ХX	х		X.	хx	X	X	х		1	Ħ	#	DEFP CREEK
	PROY POND HOLOCHB CREEK	INTERNITTENT FOND INTERNITTENT FERSAN	x x	X	╂╌╂╌		X X	+×	X	X		+	H	+	DEEP CREEK
	CLIPTLE REAR TREES	INTERNIT STREAM	x x	#	#	x	хх	丰	х	Х		#	Ħ	#	DEEP CHEEK
	ARE AREXMENT	LAKE LAKE	X X X	x	X		x x	╅	X	x		┿	╢	+	DEED HEEK
	HUOKS CREEN	PERENNIAL STREAM	хx			×	хх	T.	х	×		ļ	П	#	DREE CREEK
	TWIN PRAYS CALEN HARLE CREEK		x x	x	╁┼		x x	╌┼	×	X		+-	x	+	THEN CHEEN
	UPPER MOJAVE HA (montinued)			11	Ħ	П	хx	Ŧ	×		I	Ŧ	П	Ŧ	DEMP CREEK
	RAF - KESA		x x	x	$\coprod$	x	хх	ť	x	x		$\pm$	x	±	THEF HERE
	NPE V NEW Y	LAKE	x x	x	H		x x	Ţ	X	X		F	П	Ŧ	GREEN VALLEY JAKE CREEP DELP CHEEK
	HRSW VALIDTY CARD				4 1				1-1				4	_	
	HIGH VALIDY DAKE REEN VALLET LAKE STYLAM STIZ-DHEOD RESPRESSIP	PERENNIAL STREAM MEGGRAFIA	ХX	x	П		хx	┸	х	X		Ţ	П		UPPER MODAVE SUBJECT ON
	HOWN VALLEY LAKE  MESON VALLEY LAKE MISSAM  SHOON VALLEY LAKE  SHOON VALLEY LAKE	PERENNIAL STS-EAM PERENNIAL IN LAKS	x x	X	Ħ	X :	ХХ	- ;	Х	Х		Ŧ	H	+	CHASS VALLEY LAKE WEST FORK MODAYS RIVER
	JAMEN MALLEY LANZ  REZEN MALLEY LANG NITH-AM  STALEMBROWN BESTRANDEP  SMANN MALLEY LANG  RAPPA MALLEY LANG  PERFORMANTAL RESERVE  PE	PERENDIAL STREAM HESSANIA LAKS PERENDIAL STREAM	x x x x x x x	X X X		X X	X X X X	×	X	X X				x 2	CHASS VALLEY LAKE
	HOSW VALLEY LAKE STY-AM STALEHROOD KONFINDED P  DROWN VALLEY LAKE STY-AM STALEHROOD KONFINDED P  REAST VALUEY LAKE CREEK	PERENDIAL STREAM HESSANIA LAKS PERENDIAL STREAM	x x	X X	×	X X	X X X X X -	X	X	X		x	П	x 2	CHASS VALLEY LAKI MEST FORK MAJAME RIMEP MAJAME RIMER
	JANS VALLEY LAZE  MERC VALLEY LAZE VYS-AN  SLA JERROLD RESPROZE  GROON VALLEY LARF  JESSE VALLEY LARF  JESSE VALLEY LARF  JESSE VALLEY LARF  JESSE VALLEY LARF  JESSE VALLEY LARF  JESSE VALLEY  JESSE	ANDRONAL STANDAM  JAMASAN TA  LANS PRIMARIA, STANDAM  WITHAMPO  WITHAMPO	x x x x x x	X X X		X X X	X X X X X -	X X	X	X X		x	П		CHASS VALLEY LAKI MEST FORK MAJAME RIMEP MAJAME RIMER
628.30	JANY MALIAN LAAZ  MERK MALIA LAAK MY-AM  SILA EMBOD KONFROSTF  ROOM WATER LAW PRESS  DEFEN MALIAN LAW PRESS  TOPER MANAGE ROOM, TOPER MALAN H  VIEW MANAGE AND AND BES	PAREMIAS STRAM  ASSASSAS A  LASS  PROPRIEST, STRAM  JETHANDO  JETHANDO	x x x x x x x x x x x x x x x x x x x	X X X X X	i] [x	X X	x x x x x x	X X	x	X X X		ř		x x	BRIAN WALEN LAN JEHT FORK MAJANE RIVER MAJANE RIVER
628.30	MANY MALLY LANZ MERCH VALLY LANG VITY-MY SLASHWOOD ROMPHOOD P SHOWN MALLY LANG PRESK PRESK MALLY LANG PRESK PRESK MANUAL ROMEN LOVER LOVE B PRESK MANUAL ROMEN LOVER LOVE B PRESK MANUAL ROMEN LOVER B PRESK MANUAL ROMEN LOVER B PRESK METCHANIA METC	PAREMIAS STRAM  ASSASSAS A  LASS  PROPRIEST, STRAM  JETHANDO  JETHANDO	x x x x x x x x x x x x x x x x x x x	X X X X X	i] [x	X X	x x x x x x	X X	X	X X X		ř			BRIAN WALEN LAN JERT FORK MAJANE RIVER MAJANE RIVER
628.30 628.40	JANY MALIAN LANZ  MERRY MALIA LANG MY-AM  SLIGHWHOLD RENEROLEP  BROWN MAY FELLEN PROBLEM  PRESEN MALIAN LANG PRESEN  PRESEN MALIAN LANG PRESEN  PRESEN MALIAN LANG PRESEN  PRESEN MALIAN LANG PRESEN  MEDICAL PROBLEMS  MEDICAL ROLLAND  MEDICAL MOLANNE MYDROLOGIC AREA  MINOR MEDICAL MYTAN  LOCKMART WYDROLOGIC AREA  LOCKMART WYDROLOGIC AREA  LOCKMART WYDROLOGIC AREA	ANDERSON AS STEPANS  LASS  LASS  PERSON AS STEPANS  ANTI-ANTO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	×	X X	x x x x x x x x x x x x x x x x x x x	x x x	x x x	x x x x		× ·		x x	BRIAN WALEN LAN JERT FORK MAJANE RIVER MAJANE RIVER
628.30 628.40	JAMEN WALLEY LANZ  MEREN WALLEY LANG VITY-MI SLANGHWORD RESPRENCYP  SHANGHWORD RESPRENCYP  SHANGHWORD RESPRENCYP  SHANGHWORD RESPRENCYP  SHANGHWORD RESPRENCYP  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC MOTORIC STATES  METOLIC STATES	ANDERSON AS STEPANS  LASS  LASS  PERSON AS STEPANS  ANTI-ANTO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO  METLANDO	x x x x x x x x x x x x x x x x x x x	x x x x x x x x x x x x x x x x x x x	×	X X	x x x x x x x x x x x x x x x x x x x	X X X	x x x	x x x x		×		x x	BANSE WILLEY LAND HEST PORK MAINT RIVER HAZANTE RIVER

TABLE 2-1. BENEFICIAL USES OF SURFACE WATERS OF THE LAHONTAN REGION

			Т	•	BENEFIC	TAT 110	190				<u> </u>
	HYDROLOGIC UNIT/SUBUNIT DRAINAGE FEATURE	WATERBODY CLASS MODIFIER	I							_	RECEIVING WATER
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	GRASS VALLEY HYDROLOGIC SUBARRA	331 3 4 1 3 4 1									1 1 1 1 1 1 1 1
l	MINOP SURFACE WATERS		X X	X	XXX	ХX	X	П	ΠI	Т	
l	MINOR WETLANDS	RETLANDS	x x	X X	x x	[x x	[x]	х		x x	
628 42	HARPER VALLEY HYDROLOGIC SURAREA	<u>,</u>									
	BIRE GARINES	SPRINGS	XX	X	X X	ХX	ΙxΙ		777		HARPEN VALLEY GROUNDWATER
	KAMPEN LAKE	MIGHT DAKE	x x	X	ХX	×х	x	$\top$	T	Т	INTERNALLY CHAINED CARL
	JPAT MEN SURTHON  'ABPTE LAKE WETLANDS	SPRINGS						П		x	
	MENOR SURFACE WATERS	MERITANDS	X X	X	XX	ХX	×	++	+-1	ХX	TANGEN LAKE
	MINOR WETLANDS	METLANUS	X X	XX	X X	X X	x	x	+	хx	
			[		1 1010	1.15151	1-1	1-1		-1-	
628.50	LOWER MOJAVE KYDROLOGIC AREA					! 1 :		: 1	!		1 1 1 1 1 1 1 1 3
	MIROR SURFROR WATERS MINOR WETCHNON	AETCANDS	XX	X.	x x	x x	TX.	Ш	$\perp$	$\vdash$	
	MINOR WETLANDS	WETCHEDS	хх	ХX	хx	LIXIX	]X	[X]	ш	x x	<u> </u>
628.60	NEWBERRY SPRINGS HYDROLOGIC AREA		11.	: 1	. ! !	7   1	:				1 1 1 1 1 1 1
	MINON SUMBACO WATERS		хх	x	X X	x x	X	T	TT	Т	
	YEROR WETLANDS	WETLANDS.	хх	хх	X X	ХX	X	x	П	ХX	
628 63	TANE WASK HYDROLOGIC SUBAREA				; .						
024.61	MANE MASE HYDROLOGIC SUBAREA MINOR STREAMS WATERS		XX	x !	XX	X X	Υl	7		7	
	ATINGS IN CLAMBS	WP1(AND9	x x	x x		x x	<del> </del>	×	++	хx	<del>-</del>
	<del></del>										
	TROY VALLEY HYDROLOGIC SURAREA	<u></u>				j	-4-	ļj.		-	<u> </u>
	MINOR SURFACE WATERS MINOR PRELANDS	NGC LASEDS	X X	X X	XX	x x		<del>   </del>	₩	ХX	
	MIRCH PELAKES	AS, LARUS	X X	X X	TTVIVI	J. [ * ] * ]	. [ * ]	I X I		X į X	
628,70	AFFON KYDROLOGIC AREA	81 (	: ; ]	11.1	1 . 1	: :	i	1 :	ļ.	1	
	MINOP PURFACE WATERS		x x	x	X X	X X	[X]	П			
	MINOR HETSAITVS	WPTLANDS	хх	хx	хx	X X	X)	х	$\perp$	x x	
619 71	CAVES SYDROLOGIC SUBAREA	E3	3 · 1		1 ) 1	:					
020,11	MCCAVI SEVER		хx	x	x x	ХX	х	77	T	77	MOZAVE R. FORKO RECEPUTE
	MIN'R SIREATE MATERS		X X	x	] x [ x	x[x]	[x]	$\Box$		$\Box$	
	MINOP WET ANDS	WEST LANDS	x x	X X	x x	хх	х	X		ХX	
COA 773	CROMESE HYDROLOGIC SUBAREA										
028.12	HITTER SENTINGS	NSTLANDS	хx	x	x x	x x	I x I	7	7	хX	CROKESE VALCEY 12W
	CHONECE LAKEN (BANT AND WES )	WETTANDS	x x	x	X X	x x		++			CRONESE LAKES
	MIRGR STREATE WATERS		X X	x	ХX	X X	×	$\Box$	11		
	MIRCH WELLANDS	NETTI, PNOS	X X	x x	x x	x x	x	X		хх	
600 77	LANGYORD HYDROLOGIC SUBARRA		1 / 1	1	1	1					
020.73	M. NY K. DI KA. F. MATE'S		XX	X I	ХX	x x	I X I	Ţ	7	77	
	MIROR SET Afte	WESLANDS	X X	XX	X X	X X	X	x	++	хх	
		•									
	HARRY HYDROLOGIC AREA	<u> 5 faal                                   </u>					-				
	MINOR SURFACE WATERS MINOR WETLAND	MESCLANDG	x x	x x	X X	x x	┪╬┼	+ <del></del>	$\Box$	<del>,   ,</del>	
	HIRON PELDINA	MALE PROPERTY.	1*1*1	10101	1 1 1 1 1	1 1 1 1 2 1	1^1	1^1		~   ^	
628.81	SILVER LAKE SYDROLOGIC SUBAREA		i . i	1 :	1 1	1 : 1	i	: 1	- 1		4 3 4 1 1 1 1 1 1 T
	DID/EF LAKE	ASKALL DAKE	X X	X	X X	x x	x x	##	17		INCHES DANS OF PRINCIPLY OF
	HALLONAN JOHENNA INDIAN GERONG	PRINT/EME/GRMI	x x	X X	X X	X X	X	₩	+		SILVER LAKE
	CANE SPRING	SPRING	XX	x x	x   x	x x	x	╁	++		SILAR LAKE
	OSANUTE SPRURS	SPRING	x x	X X	ХX	X X	٦×٢	77	+-+	77	Alloka fas-
	HERRY NORTH	39K LMS	X X	XX	ХX	x x	х	П	П	П	STEVEN FARM
l	MINOR SURFACE WATERS	MPT' ANDS	X X	X X	XX	ХX	×	ĮŢ.	17	Ц	
	MINOR WETLANDS	ME-1 - ANDR	[x]x]	[x]x]	хx	] x[x	_ [x]	1*1	П	×ΙΧ	
628.B2	SODE LAKE HYDROLOGIC SUREFRIE		1 : :			مسترسا		:			
	ODE JAPP	ALKALI LAKE	ХX	х	x x x	] x [x	X.	П'	$\coprod$	X	INTERNALLY DEALNED LAKE
	PACKE SPRING	SPEINS EMPROENT	X X	ХX	X X X			X	x		PATUTE WASHINGSTON VALLEY ON
	MORAVE RIVER MUNCHURE WHINGS	SHKINSS	X X	x	X X	X X	x	₩	Н		MAJAVE HIVER SINK
	MUNCHIE SCHINGS MINCR SURFACE WATERS	PRINCE	X X	x	XX	XX		++	++	┧	PERSONE REASE SERVE
	MINO- WETLAND	MPTLANDS	x x	хx	хx		x	х	世	хх	
628.90	MELSO SYDROLOGIC AREA							ابعب	7		
	PALLE NOT SERVING	TERTING EMPROPRIS 23-PTHC - EMPROPRIS	X X	X X	XXX	X X	X	++	++	X X	CEDAR WASH KELSO WASH
	MINISA SURTAGE WATERS		XX	- x -	Z X		A	++	++	Ή	
	MONOY WEPLANDS	MITCLANDS	XX	XX	x x	X X	x	X	士	хx	1
629.00	BROADWELL SYDROLOGIC UNIT		الكراب				4.7		Ţ.		نتباكا كالتجييجي
	MINOR WETLANDS	WELL WITH	┪╬╏╬┤┤	-  <u>* *</u>	x x x	XX	<del>                                      </del>	++	╫	┯	
	process of entire a measure		10161		4   4   4	1014	161		_	_	

Changes to Table 2-1 of the Lahontan Basin Plan made in plan amendments adopted in July 2000 and finally approved in April 2002. The table below shows the beneficial uses remaining for these water after removal of the potential Municipal and Domestic Supply (MUN) use designation. Rows for individual water bodies in the Table below will be revised in or added to Table 2-1 of the Basin Plan when the plan is reprinted; fonts will be revised to match the rest of the table. See Chapter 2 of the Basin Plan for the meaning of abbreviations in the "Beneficial Use" columns.

Receiving Water		Honey Lake	Honey Lake	Little Walker River	Hot Creek	Hot Creek or Owens River	Crowley Lake	Owens River	Deep Springs Val. GW	Amargosa Subarea GW
Receivi Water		Hg.	Ноі	Little River	Нон	Hot	ည်	δ 0	De6 Val	Am Sub
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BENEFICIAL USES	3 4 8 Z		x	x	X			Х	Х	X
IAI	400 A									
FIC	COZZ		X	×	×	×	×	×	×	
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	ZDZ									
WATERBODY CLASS MODIFIER		Hot Springs	Hot Springs	Perennial Stream	Springs	Perennial Stream	Alkali Lake	Springs	Intermittent Lake	Intermittent Stream
HYDRO- LOGIC UNIT/ SUBUNIT DRAINAGE FEATURE		Wendel Hot Springs	Amedee Hot Springs	Hot Creek	Fales Hot Springs	Little Hot Creek	Little Alkali Lake	Keough Hot Springs	Deep Springs Lake	Amargosa River
HU No.		637.20	637.20	631.40	631.40	603.10	603.10	603.20	605.00	609.00

Summary of Beneficial Uses for Waterbodies Identified in the Nevada Administrative Code

Ž	Name	Description	<b>788</b> 1	втоск	ВЕСН	MEC-2	IND UNI	MILD	SITAUDA	ENHANCE	HSAAM	Aquatic species of concern
<b>CLASS A WATERS</b>	ATERS				ŀ	ŀ		ŀ	ŀ	-		
445A.124   Variou	Various waterbodies		×	×	×	×	<b>A</b>	×	×		_	
445A 125	Various waterhodies		×	×	×	×	×	×	<u> </u>		-	
CLASS C WATERS	TERS				<del> </del>	{	-	┨	1		┨	
445A.126	Various waterbodies		×	×	×	×	×	×	×			
<b>CLASS D WATERS</b>	4 TERS											
445A.127	Various waterbodies		×	×	-	×	×	×	×			
CARSON RIVER BASIN	VER BASIN				ŀ	-						
445A.147	West Fork Carson River	At stateline	×	×	×	×		-	_			rainbow frout, brown trout
445A.148	Bryant Creek	At stateline	×	×	×	×	_	+	_		-	rainbow trout, brown trout
445A.149	East Fork Carson River	At stateline	××	×	××	××	×	× >	+	1		rainbow frout, brown trout
445A.151	East Fork Carson River	Highway 395 to Muller Lane	<×	<×	<×	<×	+	+-	< ×		+	rainbow front, brown front
445A.152	EF/WF & Carson River	EF at Muller to Genoa Lane & WF at	×	×	×	×	×	-				catfish, rainbow trout, brown trout
		stateline to Genoa Lane					-	$\dashv$	-			
445A.153	Carson River	Genoa Lane to Cradlebaugh Bridge	×	×	×	×	×	$\dashv$	×			catfish, rainbow trout, brown trout
445A.154	Carson River	Cradlebaugh Bridge to Mexican Ditch Gage	×	×	×	×		×				rainbow trout, brown trout
445A.155	Carson River	Mexican Ditch Gage to New Empire	×	×	×	×	×	×	×			smallmouth bass, rainbow trout, brown trout
445A.156	Carson River	New Empire to Dayton Bridge	×	×	×	×	H	×	×			walleye, channel catfish, white bass
445A.157	Carson River	Dayton Bridge to Weeks Bridge	×	×	×	×	×	Н				walleye, channel catfish, white bass
445A.158	445A.158 Carson River	Weeks Bridge to Lahontan Dam	×	×	×	×	×	<u>×</u>	Н			walleye, channel catfish, white bass
WALKER RI	VER BASIN											
445A.160	West Walker River	At stateline	×	×	×	×	×	×	×			mountain whitefish, rainbow trout, brown trout
445A.161	Topaz Lake	Various points in Topaz Lake	×	×	×	×	×	×	×			rainbow trout, brown trout, cutthroat trout, kokone salmon, silver salmon
445A.162	West Walker River	CA stateline to Wellington	×	×	×	×	×	×	×			mountain whitefish, rainbow trout, brown trout
445A.163	West Walker River	Wellington to confluence with East Walker River	×	×	×	×	×	×	×			rainbow trout, brown trout
445A.164	Sweetwater Creek	CA stateline to the East Walker River	×	×	×	×	×	×	×			mountain whitefish, brown trout, brook trout, rainbow trout
445A.165	East Walker River	At stateline	×	×	×	×	×	×	×			mountain white fish, rainbow trout, brown trout
445A.1655	East Walker River	Stateline to Bridge B-1475	×	×	×	×	×	×	×			mountain white fish, rainbow trout, brown trout
445A.166	East Walker River	Bridge B-1475 to East/West Walker confluence	×	×	×	×	×	×	×			brown trout, rainbow trout
445A.167	Walker River	East/West Walker confluence to Weber Reservoir Inlet	×	×	×	×	× ×	×	×			channel catfish, largemouth bass
445A.168	Walker River	Weber Reservoir to Walker Lake						stanc	dards de	State standards do not apply on tribal lands	on triba	il lands
445A.169	Desert Creek	CA stateline to the West Walker River	×	×	×	×	×	×	×			brown trout, brook trout, rainbow trout

Summary of Beneficial Uses for Waterbodies Identified in the Nevada Administrative Code

	Aquatic species of concern	tui chub, Tahoe sucker, and adult and juvenile Lahontan cutthroat trout												warmwater fishery	warnwater fishery		excluding tist		excluding fish										all life stages of mountain whitefish, rainbow trout, brown trout	all life stages of mountain whitefish, rainbow frout, brown trout	all life stages of mountain whitefish,	juvenile and adult rainbow trout, juvenile	and adult brown trout	juvenile and adult rainbow trout, juvenile and adult brown trout	early spawning Lahontan cutthroat trout and their incubation, larvae, juveniles
``.	неяам	tui chu juvenik												warmw	warmw	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			X exclud		$\frac{1}{1}$	_	-	$\frac{1}{1}$					all life a rainbor	all life	all life	juvenil	and ad	juvenil and ad	early s and the
	ENHANCE							ŀ			_	$\vdash$				+					+	$\dashv$	ŀ	1	No hondricip age defined	3	No beneficial uses defined	No beneficial uses defined					1		
	DITHTSH							┝	H		r					$\dagger$					1	$\dashv$	t	1	1 2001		l uses (	l uses o			ļ	-	-		
	ЭІТАИДА	×		×	×	×		×	×	×	×	×	×	×	×	,	<		×	×	×	×	,	×	proficio		eneficia	eneficia	×	×	×	×		×	×
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ial Use	NOM			×	×	×					×	×	×	×						×			,	×					×	×	×	×		×	×
enefic	<b>dni</b>			×	×	×		×	×	×	×	×	×	X	×					×	×	×	,	×					×	×	×	×		×	×
Beneficial Uses	REC-2	×		×	×	×		×	×	×	×	×	×	×	×	>	<		×	×	×	×	;	×					×	×	×	×		×	×
5	REC-1	×		×	×	×					×	×	×	×									[	×					×	×	×	×		×	×
	зтоск			×	×	×		×	×	×	×	×	×	×	×	,	<		×	×	×	×	ļ	×					×	×	×	×		×	×
	ਬਬਾ			×	×	×		×	×	×	×	×	×	×	×	,	<		×	×	×	×	,	×					×	×	×	×		×	×
から、一般などのできない。	Description	Walker Lake		Above highway maintenance station	Above center of Section 9, T2S, R34E	Above hydroelectric plant		AZ stateline to Mesquite	At stateline	Mesquite to river mouth at Lake Mead	Above Schroeder Reservoir	Lake Mohave Inlet to CA stateline	Hoover Dam to Lake Mohave Inlet	Excluding area covered by NAC 445A.197	West boundary of Las Vegas Bay campground to confluence of Las Vegas	Wash	Confidence of discharges from City of Las Vegas and Clark County wastewater	treatment plants to Telephone Road	Telephone Road to Lake Mead	River source to Glendale	Glendale to Lake Mead	Bridge above Rox to Muddy River		Above fish hatchery	No domination of the		No description given	No description given	At stateline	CA stateline to Idlewild	Idlewild to East McCarran Blvd	East McCarran Blvd to Lockwood		Lockwood to Derby Dam	Derby Dam to Wadsworth
	Na a de de de de de de de de de de de de de	Walker Lake	GION	Chiatovich Creek	Indian Creek	Leidy Creek	COLORADO RIVER BASIN	Virgin River	Virgin River	Virgin River	Beaver Dam Wash	Colorado River	Colorado River	Lake Mead	Lake Mead		Las vegas wasn		Las Vegas Wash	Muddy River	Muddy River	Meadow Valley Wash	GREAT SALT LAKE BASIN	Snake Creek	EGION	VER BASIN	Bronco Creek	Gray Creek	Truckee River	Truckee River	Truckee River	Truckee River		Truckee River	Truckee River
	NAC	445A.1696	CENTRAL REGION	445A.171	445A.172	445A.173	COLORADO	445A 175	445A.176	445A.177	445A.178	445A.192	445A.193	445A.195	445A.197		445A.199		445A.201	445A.210	445A.211	445A.212	GREAT SAL	445A.179	WESTERN REGION	TRUCKEE RIVER BASIN	445A.181	445A.182	445A.184	445A.185	445A.186	445A.187		445A.188	445A.189

# Summary of Beneficial Uses for Waterbodies Identified in the Nevada Administrative Code

	Aquatic stractas of concam	ands	coldwater fishery	coldwater fishery		warmwater fishery	warmwater fishery	warmwater fishery	warmwater fishery	warmwater fishery	warmwater fishery											ands	
	WYKSH ENHYNCE	standards do not apply on tribal lar	<u> </u>	X		*	*	<u>*</u>	w -	*	*											not apply on tribal la	
	offahreak	o not a	×				Н															lo not a	
	OITAUDA	dards c	X X	x   >		×   ×	×	×	x	×	x   x		×   ×	×   	×   	× - ×	x   x	×   ×	×	x   x	×	standards do	×
Uses	MULD	te stan	×	x   x		( ) X	^ ×	` X	^ x	^ ×	<		^   	`  ×	^   	^ ×	^ _ ×	×	( ) X	^ ×	^ ~	te stan	$\frac{}{\times}$
Beneficial	CNI	State	×	`   x		(	×	(   X	`	×	(   X		(   X	(   X	`	×	`	×		×	×	State	×
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	Z-0FE		×	×		×	× _	<u> </u>	(	<b>₹</b>	`		\ 	(	<u>_</u>	<u> </u>	\ 	Ľ	$\hat{\parallel}$	_	` 		
	KEC-1		×	×		×	×	×	×	×	×		×	×	×	×	×	×	×	×	×		$\stackrel{\times}{-}$
	STOCK		×	×		×	×	X	×	×	×		×	×	×	×	×	×	×	×	×		×
	<u> </u> 설심		×	×		×	×	×	×	×	×		×	X	X	X	X	×	×	×	×		×
	Description	Wadsworth to Pyramid Lake	Lake Tahoe	All tributaries		Source to Osino	Osino to Palisade	Palisade to Battle Mountain	Battle Mountain to State Highway 789	Comus to Imlay	Imlay to Woosley		Entire reach	Entire reach	Entire reach	Entire reach	Upstream from Jarbidge	Jarbidge to stateline	Entire reach	Wildhorse Reservoir to Mill Creek	Mill Creek to New China Dam	New China Dam to stateline	Entire reach
	Name	Truckee River	Lake Tahoe	Tributaries to Lake Tahoe	HUMBOLDT RIVER BASIN	Humboldt River	Humboldt River	Humboldt River	Humboldt River	Humboldt River	Humboldt River	ER BASIN	Big Goose Creek	Salmon Falls Creek	Shoshone Creek	EF Jarbidge River	Jarbidge River	Jarbidge River	West Fork Bruneau River	East Fork Owyhee River	East Fork Owyhee River	East Fork Owyhee River	South Fork Owyhee River
	<b>5</b>	445A.190	445A.191	445A.1915	HUMBOLDT	445A.203	445A.204	445A.205	445A.206	445A.207	445A.208	SNAKE RIVER BASIN	445A.215	445A.216	445A.217	445A.218	445A.219	445A.220	445A.221	445A.222	445A.223	445A.224	445A.225

Propagation of wildlife Propagation of aquatic life Waters of extraordinary ecological or aesthetic value Enhancement of water quality Maintenance of a freshwater marsh AQUATIC AESTHETIC ENHANCE MARSH Recreation notinvolving contact with the water Industrial supply Municipal or domestic supply, or both Recreation involving contact with the water Watering of livestock Irrigation IRR STOCK REC-1 REC-2 IND

With treatment by disinfection only
With treatment by disinfection and filtration only
With complete treatment